



01-0505

Corporate Environmental Programs  
General Electric Company  
100 Woodlawn Avenue, Pittsfield, MA 01201

*Transmitted Via Overnight Courier*

July 30, 2002

Mr. Bryan Olson  
EPA Project Coordinator  
U.S. Environmental Protection Agency  
EPA New England  
One Congress Street, Suite 1100  
Boston, Massachusetts 02114-2023

Re: **GE-Pittsfield/Housatonic River Site**  
**Groundwater Management Area 2 (GECD320)**  
**Baseline Groundwater Quality Interim Report for Spring 2002**

Dear Mr. Olson:

In accordance with GE's Addendum to the Baseline Monitoring Program Proposal for Groundwater Management Area 2, enclosed is the *Groundwater Management Area 2 Baseline Groundwater Quality Interim Report for Spring 2002*. This report summarizes baseline monitoring program activities and presents the results of the groundwater sampling and analysis performed to date at Groundwater Management Area 2.

Please call Andrew Silfer or me if you have any questions regarding this report.

Sincerely,

BLASLAND, BOUCK & LEE, INC.

*Richard W. Gates, DAJ*

Richard W. Gates  
Remediation Project Manager

DAJ/nls  
Enclosure

cc: Michael Nalipinski, EPA  
Tim Conway, EPA (cover letter only)  
Holly Inglis, EPA  
K.C. Mitkevicius, USACE  
Dawn Jamros, Weston  
Alan Weinberg, MDEP (cover letter only)  
Robert Bell, MDEP (cover letter only)  
Susan Steenstrup, MDEP (2 copies)  
Susan Keydel, MDEP  
Thomas Angus, MDEP (cover letter only)  
Mayor Sara Hathaway, City of Pittsfield  
Pittsfield Commissioner of Public Health  
Thomas Hickey, Director, PEDA  
Jeffery Bernstein, Bernstein,  
Cushner & Kimmel  
Theresa Bowers, Gradient  
Nancy E. Harper, MA AG  
Dale Young, MA EOEA  
Michael Carroll, GE (cover letter only)  
Andrew Silfer, GE  
Rod McLaren, GE (cover letter only)  
James Nuss, BBL  
James Bieke, Shea & Gardner  
John Ciampa, SPECTRA  
Property Owner - Parcel K10-10-3  
Property Owner - Parcel K10-10-4  
Property Owner - Parcel K10-10-5/-6  
Property Owner - Parcel K10-10-33  
Property Owner - Parcel K10-11-1  
Property Owner - Parcel K10-11-2  
Property Owner - Parcel K10-11-3  
Property Owner - Parcel K10-11-5  
Property Owner - Parcel K10-12-1  
Property Owner - Parcel K10-13-1  
Public Information Repositories  
GE Internal Repositories

**R E P O R T**

---

*Groundwater Management Area 2  
Baseline Groundwater Quality  
Interim Report for Spring 2002*

**General Electric Company  
Pittsfield, Massachusetts**

**July 2002**



# **Table of Contents**

---

<b>Section 1. Introduction.....</b>	<b>1-1</b>
1.1 General.....	1-1
1.2 Background Information .....	1-2
1.3 Format of Document.....	1-3
<b>Section 2. Field and Analytical Procedures.....</b>	<b>2-1</b>
2.1 General.....	2-1
2.2 Well Installation and Hydrogeologic Activities .....	2-1
2.3 Turbidity Assessment.....	2-2
2.4 Groundwater Sampling and Analysis .....	2-3
<b>Section 3. Groundwater Analytical Results .....</b>	<b>3-1</b>
3.1 General.....	3-1
3.1.1 VOC Results.....	3-1
3.1.2 SVOC Results .....	3-1
3.1.3 PCB Results .....	3-2
3.1.4 Pesticide/Herbicide Results.....	3-2
3.1.5 PCDD/PCDF Results .....	3-2
3.1.6 Inorganics Results .....	3-2
<b>Section 4. Assessment of Results .....</b>	<b>4-1</b>
4.1 General.....	4-1
4.2 Groundwater Quality Performance Standards .....	4-1
4.3 Groundwater Quality .....	4-3
4.3.1 Groundwater Results Relative to GW-2 Performance Standards.....	4-3
4.3.2 Groundwater Results Relative to GW-3 Performance Standards .....	4-4
4.3.3 Comparison to Upper Concentration Limits .....	4-5
<b>Section 5. Proposed Program Modifications.....</b>	<b>5-1</b>
5.1 General.....	5-1
5.2 Low-Flow Sampling Procedures.....	5-1
5.3 Cyanide Analyses.....	5-1
<b>Section 6. Schedule of Future Activities.....</b>	<b>6-1</b>
6.1 General.....	6-1
6.2 Field Activities Schedule .....	6-1
6.3 Reporting Schedule .....	6-1

---

## Tables

- 1 Monitoring Well Construction
- 2 Groundwater Elevation Data – Winter and Spring 2002
- 3 Hydraulic Conductivity Results
- 4 Field Parameter Measurements - Spring 2002
- 5 Validated Groundwater Analytical Results
- 6 Comparison of Groundwater Analytical Results to MCP Method 1 GW-2 Standards
- 7 Comparison of Groundwater Analytical Results to MCP Method 1 GW-3 Standards
- 8 Comparison of Groundwater Analytical Results to MCP Upper Concentration Limits for Groundwater

## Figures

- 1 Site Location
- 2 Baseline Monitoring Well Locations - Spring 2002
- 3 Water Table Contour Map - Winter 2001
- 4 Water Table Contour Map - Spring 2002

## Appendices

- A Monitoring Well Logs
- B Field Sampling Data
- C Hydraulic Conductivity Data
- D Data Validation Report

# **1. Introduction**

---

## **1.1 General**

On October 27, 2000, a Consent Decree (CD) executed in 1999 by the General Electric Company (GE), the United States Environmental Protection Agency (EPA), the Massachusetts Department of Environmental Protection (MDEP), and several other government agencies was entered by the United States District Court for the District of Massachusetts. The CD governs (among other things) the performance of response actions to address polychlorinated biphenyls (PCBs) and other hazardous constituents in soil, sediment, and groundwater in several Removal Action Areas (RAAs) located in or near Pittsfield, Massachusetts that collectively comprise the GE-Pittsfield/Housatonic River Site (the Site). For groundwater and non-aqueous-phase liquid (NAPL), several RAAs at and near the GE Pittsfield facility have been divided into five separate Groundwater Management Areas (GMAs). These GMAs are described, together with the Performance Standards established for the response actions at and related to them, in Section 2.7 of the *Statement of Work for Removal Actions Outside the River* (SOW) (Appendix E to the CD), with further details presented in Attachment H to the SOW (Groundwater/NAPL Monitoring, Assessment, and Response Programs). The present report relates to the Former Oxbows J and K Groundwater Management Area, also known as GMA 2.

In February 2001, GE submitted a *Baseline Monitoring Program Proposal for Former Oxbow Areas J and K Groundwater Management Area* (GMA 2 Baseline Monitoring Proposal). That Proposal summarized the then-available hydrogeologic information for GMA 2, identified several initial field activities, and proposed future groundwater monitoring activities for the baseline monitoring period at this GMA. EPA provided conditional approval of the GMA 2 Baseline Monitoring Proposal by letter of September 6, 2001, and GE subsequently submitted an Addendum to that proposal by letter of September 21, 2001, incorporating the conditions in EPA's letter. Thereafter, during well installation activities, the locations of a couple of the proposed wells were modified due to field conditions, with approval of EPA's contractor, Weston Solutions, Inc.

As part of the baseline monitoring program, GE is required to submit reports on a semi-annual basis to summarize groundwater monitoring results and related activities and, as appropriate, propose modifications to the monitoring program. This *Groundwater Management Area 2 Baseline Groundwater Quality Interim Report for Spring 2002* (Spring 2002 GMA 2 Groundwater Quality Report) presents the results of groundwater measurements collected at GMA 2 in January 2002 and April 2002, groundwater sampling and analysis performed at this GMA in April 2002, and certain other groundwater characterization activities performed as part of this program.

---

## **1.2 Background Information**

As discussed above, the CD and the SOW provide for the performance of groundwater-related Removal Actions at the GMAs. GMA 2 includes Former Oxbow Areas J and K, which are located adjacent to the Housatonic River approximately 2,500 feet upstream of the Newell Street Bridge (Figures 1 and 2). Consistent with a February 2002 modification to the CD, Former Oxbow Area J encompasses an area of approximately 6 acres generally located north of the Housatonic River, south of East Street, and between Fasce Street and Commercial Street. Former Oxbow Area K encompasses an area of approximately 2.5 acres south of the Housatonic River, across from the eastern portion of Former Oxbow Area J and generally to the northeast of Ventura Avenue.

Certain portions of this GMA originally consisted of land associated with oxbows or low-lying areas of the Housatonic River. Rechannelization and straightening of the Housatonic River in the early 1940s by the City of Pittsfield and United States Army Corps of Engineers separated several of these oxbows and low-lying areas from the active course of the river. These oxbows and low-lying areas were subsequently filled with various materials from a variety of sources, resulting in the current surface elevations and topography.

As set forth in the GMA 2 Baseline Monitoring Proposal Addendum, the baseline groundwater monitoring program at this GMA was required to involve a total of 12 monitoring wells (including two existing wells and 10 new wells) and a river staff gauge. All of these wells are to be monitored for groundwater elevations and 11 of them are to be sampled for certain groundwater quality parameters. As discussed further in Section 2, the 10 new monitoring wells and the river staff gauge were installed as part of initial GMA 2 baseline activities, although the locations of two new wells were modified in the field, with Weston approval, due to topographical conditions. Following installation, well development was conducted at the new wells. All 12 monitoring wells in the program, plus one other existing well, were monitored in spring 2002 to determine groundwater elevation and flow direction, and the water elevation of the Housatonic River at the west side of GMA 2 (at an existing footbridge) was measured at the staff gauge. In addition, the 11 wells subject to groundwater sampling were sampled for analysis of PCBs and certain groups of non-PCB constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents -- benzidine, 2-chloroethylvinyl ether, and 1,2-diphenyhydrazine (Appendix IX+3). Finally, hydraulic conductivity testing was performed at the 10 new wells in the program. NAPL has not been found within GMA 2; however, monitoring for any presence of NAPL in groundwater is performed as part of the baseline monitoring program.

---

### **1.3 Format of Document**

The remainder of this report is presented in five sections. Section 2 describes the groundwater-related activities performed at GMA 2 in spring 2002. Section 3 presents the analytical results obtained during the spring 2002 sampling event performed in April 2002. Section 4 provides a summary of the groundwater quality Performance Standards identified in the CD and SOW and provides an assessment of the results of the spring 2002 activities, including a general comparison to those Performance Standards. Section 5 proposes certain modifications to the current baseline groundwater monitoring program. Finally, Section 6 presents the schedule for future field and reporting activities related to GMA 2.

## **2. Field and Analytical Procedures**

### **2.1 General**

The activities conducted as part of the baseline groundwater monitoring program and summarized herein primarily involved well installations, groundwater level measurements, and groundwater sampling and analysis at several locations within GMA 2. Field procedures used to collect and analyze groundwater samples, and to measure site groundwater levels on two occasions, are discussed in this section. In addition, information regarding well installation, development, and hydraulic conductivity (slug) testing at certain of the wells at GMA 2 are provided in this section. All activities were performed in accordance with GE's approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP).

### **2.2 Well Installation and Hydrogeologic Activities**

Initial activities at GMA 2 included the installation and development of 10 new monitoring wells and the installation of a staff gauge in the river between the dates of October 9, 2001 and January 30, 2002. These new wells are identified as GMA2-1 through GMA2-9 and J-1R. During the installation of these wells, the locations of two of the wells -- GMA2-6 and GMA2-7 -- had to be modified somewhat from the locations proposed in the GMA 2 Baseline Monitoring Proposal Addendum because topographical conditions precluded well installations at the proposed locations. These modifications were approved by Weston on EPA's behalf. The locations of the 10 new wells and staff gauge are shown on Figure 2, along with the locations of the three existing wells at this GMA (MW-1 and MW-2 which are included in the baseline program, and MW-3 which is not included in the baseline program but was monitored for water elevations and flow in spring 2002 for informational purposes). Table 1 shows the survey data and well construction details for the 10 new wells, together with the survey data and available well construction details for the three existing wells and survey data for the staff gauge. Well logs for the new wells are presented in Appendix A.

Groundwater elevation monitoring activities were performed in January and April 2002. These activities included collecting groundwater level data at the 10 new wells and three existing wells and measuring the river elevation at the staff gauge. These data are presented in Table 2. The January and April 2002 groundwater elevation data were used to prepare groundwater elevation contour maps (Figures 3 and 4, respectively). As shown on these figures, the interpreted groundwater flow direction is generally toward the Housatonic River on the north and south sides of the river. As depicted on Figures 3 and 4, the hydraulic gradient within GMA 2 is

---

fairly consistent across Former Oxbow Areas J and K, with the horizontal component decreasing towards the Housatonic River.

The first semi-annual groundwater sampling event for GMA 2 was performed on April 15-17, 2002 at the 11 wells subject to such sampling (the 10 new wells plus one existing well, MW-2). Field sampling data associated with these activities are presented in Appendix B, while the results are described in several tables and within the remainder of this document.

Hydraulic conductivity testing was performed on July 16 and 17, 2002 at the 10 new wells at GMA 2. The observed hydraulic conductivities ranged from 2.816E-03 centimeters per second (cm/sec) at well GMA2-9 to 4.922E-02 cm/sec at well GMA2-6. The results of this testing are summarized in Table 3 and plots of the data for each well tested are provided in Appendix C.

### **2.3 Turbidity Assessment**

Prior to the spring 2002 sampling event at GMA 2, GE conducted an assessment of various sampling equipment to identify possible techniques to reduce the turbidity of the collected groundwater samples. This assessment was performed for several wells located within the Plant Site 1 GMA (GMA 1) as part of the fall 2001 sampling event at that GMA. These approaches included the following:

- Field testing of potential modifications to GE's standard low-flow sampling equipment;
- Alternate methods to collect low turbidity samples from small diameter wells and slow recharging wells;
- Procedures to verify that accurate turbidity data are obtained; and
- Additional development or purging of high turbidity wells.

Based on the results of this assessment, it was determined that collection of all samples using a bladder pump provides the lowest turbidity at small diameter (2-inch) wells such as those at GMA 2. However, peristaltic and submersible pumps also produced acceptable results. In addition, the results indicated that use of a hand-held nephelometer following discharge through the flow-through cell provided the most reliable measurement of turbidity levels. Accordingly, the hand-held nephelometer will be incorporated into subsequent sampling rounds. Additionally, the bladder pumps will be increasingly phased into future sampling but submersible and peristaltic pumps will also continue to be utilized, particularly if acceptable turbidity results are obtained.

## **2.4 Groundwater Sampling and Analysis**

Groundwater samples were collected from 11 groundwater monitoring wells in April 2002. Low-flow sampling techniques using either a bladder, submersible, or peristaltic pump (with a bailer for volatile organic compound [VOC] samples) were utilized for the purging of the wells and collection of groundwater samples during this sampling event. Each monitoring well was purged utilizing low-flow sampling techniques until field parameters (including temperature, pH, specific conductivity, oxidation-reduction potential, dissolved oxygen, and turbidity) stabilized or the well was pumped dry prior to sample collection. Field parameters were measured in combination with the sampling activities at each monitoring well. A summary of the field parameter data is presented in Table 4 and the field sampling data are presented in Appendix A. A general summary of the field measurement results during the spring 2002 monitoring event is provided below:

PARAMETER	UNITS	RANGE
Turbidity	Nephelometric turbidity units (NTUs)	1.0 – 80.0
Temperature	Degrees Celsius	7.6 – 17.20
pH	Standard pH units	6.45 - 7.32
Specific Conductivity	Millisiemens per centimeter	0.256 – 3.780
Oxidation-Reduction Potential	Millivolts	-128.0 - 93.0
Dissolved Oxygen	Milligrams per liter	0.00 - 7.10

For this sampling event, samples from only two of the 11 monitoring wells had turbidity levels greater than 50 NTU (GMA2-3 at 52 NTU and GMA2-7 at 80 NTU). These results indicate that the sampling and measurement procedures utilized during this sampling event (developed from the turbidity assessment conducted at GMA-1) were generally effective in obtaining low turbidity groundwater samples.

Groundwater samples were submitted to CT&E Environmental Services, Inc. of Charleston, West Virginia, for laboratory analysis. Since all of these 11 wells, except well GMA2-3, are identified as GW-3 wells (as discussed below in Section 4), the samples from those 10 wells were submitted for analysis of the following constituents using the associated EPA methods:

PARAMETER	USEPA METHOD
VOCs	8260B
SVOCs	8270C
Filtered and Unfiltered PCBs	8082
Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans (PCDDs/PCDFs)	8290
Pesticides and Herbicides	8080 and 8151
Filtered and Unfiltered Metals	6010B, 7000A, and 7470A
Cyanide	9014
Sulfide	9034

Since well GMA2-3 is identified only as a GW-2 sentinel/compliance well (as discussed in Section 4), the groundwater sample collected from that well was submitted for analysis of the VOCs listed in GE's FSP/QAPP, as well as five compounds listed as SVOCs in the FSP/QAPP (1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and naphthalene). The VOCs and five SVOCs were analyzed using EPA Method 8260B in accordance with a letter from GE to EPA dated September 28, 2001.

The results of all these analyses are discussed in Section 3 below.

## **3. Groundwater Analytical Results**

### **3.1 General**

A description of the spring 2002 groundwater analytical results is presented in this section. These data were validated in accordance with the FSP/QAPP. The full, validated data set for spring 2002 is provided in Table 5, while the data validation report for these results is presented in Appendix C.

Prior to validation, the preliminary analytical data from the laboratory were presented in the monthly reports on overall activities at the GE-Pittsfield/Housatonic River Site. In addition, the results were compared to the Method 1 GW-2 and GW-3 standards set forth in the Massachusetts Contingency Plan (MCP) and to the MCP Upper Concentration Limits (UCLs) for groundwater. Tables 6 and 7 provide a comparison of the concentrations of all detected constituents with the groundwater quality Performance Standards established in the CD and SOW, while Table 8 presents a comparison of the concentrations of detected constituents with the UCLs. A general discussion of the recent GMA 2 results relative to the groundwater quality Performance Standards and the UCLs is provided in Section 4.

#### **3.1.1 VOC Results**

Groundwater samples from the 11 groundwater quality monitoring wells were analyzed for VOCs during the spring 2002 sampling event. The validated VOC analytical results are summarized in Table 5. VOCs were not detected in eight of the groundwater samples. Low levels of the VOCs trichloroethene (TCE) and tetrachloroethene (PCE) were detected in one or more of the three remaining samples. TCE was detected in samples J-1R and OJ-MW-2, while PCE was detected in sample GMA2-2. Total VOC concentrations ranged from non-detect (in eight samples) to 0.0032 parts per million (ppm).

#### **3.1.2 SVOC Results**

Groundwater samples from the 10 GW-3 monitoring wells were analyzed for SVOCs during the spring 2002 sampling event, as described in Section 2.4. In addition, the sample from GW-2 well GMA2-3 was analyzed for select SVOCs, as discussed in Section 2.4. No SVOCs were detected in any of the samples.

---

### **3.1.3 PCB Results**

Groundwater samples from 10 monitoring wells were analyzed for unfiltered and filtered PCBs as part of the spring 2002 sampling event. The PCB analytical results are summarized in Table 5. For the unfiltered analysis, PCBs were not detected in six groundwater samples, while the maximum PCB concentration among the remaining four samples was 0.00019 ppm. For the filtered samples, PCBs were not detected in nine of the 10 samples. For the remaining well (GMA2-1), a PCB concentration of 0.000072 ppm was detected.

### **3.1.4 Pesticide/Herbicide Results**

Groundwater samples from 10 monitoring wells were analyzed for pesticides and herbicides during the spring 2002 sampling event. The pesticide and herbicide analytical results are summarized in Table 5. No pesticides or herbicides were detected in any of the 10 groundwater samples.

### **3.1.5 PCDD/PCDF Results**

Groundwater samples from ten monitoring wells were analyzed for PCDDs/PCDFs during the spring 2002 sampling event. The PCDD/PCDF analytical results are summarized in Table 5. One or more PCDD/PCDF compounds were observed in nine of the ten groundwater samples. In addition, total Toxicity Equivalency Quotients (TEQs) were calculated for the PCDD/PCDF compounds using the Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO). In calculating those TEQs, the concentrations of individual PCDD/PCDF compounds that were not detected were represented as one-half the analytical detection limit for those compounds. Total TEQs ranged from  $1.7 \times 10^{-9}$  to  $2.2 \times 10^{-8}$  ppm.

### **3.1.6 Inorganics Results**

Groundwater samples from 10 monitoring wells were analyzed for unfiltered and filtered inorganics during the spring 2002 sampling event. The inorganic analytical results for these samples are summarized in Table 5. One or more inorganic constituents were detected in nine of the unfiltered samples. The most commonly observed inorganic constituents in the unfiltered samples were cyanide, detected in seven of these samples (filtered samples were not collected for this analysis), and zinc, also detected in seven unfiltered samples. Zinc was also found to be present in five of the filtered samples.

## **4. Assessment of Results**

### **4.1 General**

Since the spring 2002 monitoring event constitutes the initial sampling event in the GMA 2 baseline monitoring program, the data available at this time do not support any meaningful spatial or temporal assessment of trends in constituent concentrations. Results from subsequent semi-annual baseline sampling events will be used to identify if trends exist or if program modifications are warranted.

### **4.2 Groundwater Quality Performance Standards**

This section describes the Performance Standards applicable to response actions for groundwater at GMA 2. Those Performance Standards are set forth in Section 2.7 and Attachment H (Section 4.1) of the SOW. In general, the Performance Standards for groundwater quality are based on the groundwater classification categories designated in the MCP. The MCP identifies three potential groundwater categories that may be applicable to a given site. One of these, GW-1 groundwater, applies to groundwater that is a current or potential source of potable drinking water. None of the groundwater at any of the GMAs at the Site is classified as GW-1. However, the remaining MCP groundwater categories are applicable to GMA 2 and are described below:

- GW-2 groundwater is defined as groundwater that is a potential source of vapors to the indoor air of buildings. Groundwater is classified as GW-2 if it is located within 30 feet of an existing occupied building and has an average annual depth to groundwater of 15 feet or less. Under the MCP, volatile constituents present within GW-2 groundwater represent a potential source of organic vapors to the indoor air of the overlying occupied structures.
- GW-3 groundwater is defined as groundwater that discharges to surface water. By MCP definition, all groundwater at a site is classified as GW-3 since it is considered to ultimately discharge to surface water. In accordance with the CD and SOW, all groundwater at GMA 2 is considered as GW-3.

The CD and the SOW allow for the establishment of standards for GW-2 and GW-3 groundwater at the GMAs through use of one of three methods, as generally described in the MCP. The first, known as Method 1, consists of the application of pre-established numerical "Method 1" standards set forth in the MCP for both GW-2 and

GW-3 groundwater (310 CMR 40.0974). These "default" standards have been developed to be conservative and will serve as the initial basis for evaluating groundwater at GMA 2. The current MCP Method 1 GW-2 and GW-3 standards for the constituents detected in the spring 2002 sampling event are listed in Tables 6 and 7, respectively. (In the event of any discrepancy between the standards listed in these tables and those published in the MCP, the latter will be controlling.) For constituents for which Method 1 standards do not exist, the MCP provides procedures, known as Method 2, for developing such standards (Method 2 standards) for both GW-2 and GW-3 groundwater. For such constituents that are detected in groundwater during the baseline monitoring program, Attachment H to the SOW states that in the Baseline Monitoring Program Final Report, GE must propose to develop Method 2 standards using the MCP procedures or alternate procedures approved by EPA, or provide a rationale for why such standards need not be developed. For constituents whose concentrations exceed the applicable Method 1 (or Method 2) standards, GE may develop and propose to EPA alternative GW-2 and/or GW-3 standards based on a site-specific risk assessment. This procedure is known as Method 3 in the MCP. Upon EPA approval, these alternative risk-based GW-2 and/or GW-3 standards may be used in lieu of the Method 1 (or Method 2) standards. Of course, whichever method is used to establish such groundwater standards, GW-2 standards will be applied to GW-2 groundwater and GW-3 standards will be applied to GW-3 groundwater.

Based on consideration of the above points, the specific groundwater quality Performance Standards for GMA 2 consist of the following:

1. At monitoring wells designated as compliance points to assess GW-2 groundwater (i.e., groundwater located at an average depth of 15 feet or less from the ground surface and within 30 feet of an existing occupied building), groundwater quality shall achieve any of the following:
  - (a) The Method 1 GW-2 groundwater standards set forth in the MCP (or, for constituents for which no such standards exist, Method 2 GW-2 standards once developed, unless GE provides and EPA approves a rationale for not developing such Method 2 standards);
  - (b) Alternative risk-based GW-2 standards developed by GE and approved by EPA as protective against unacceptable risks due to volatilization and transport of volatile chemicals from groundwater to the indoor air of nearby occupied buildings; or

- 
- (c) A condition, based on a demonstration approved by EPA, in which constituents in the groundwater do not pose an unacceptable risk to occupants of nearby occupied buildings via volatilization and transport to the indoor air of such buildings.
2. Groundwater quality shall ultimately achieve the following standards at the perimeter monitoring wells designated as compliance points for GW-3 standards:
- (a) The Method 1 GW-3 groundwater standards set forth in the MCP (or, for constituents for which no such standards exist, Method 2 GW-3 standards once developed, unless GE provides and EPA approves a rationale for not developing such Method 2 standards); or
  - (b) Alternative risk-based GW-3 standards proposed by GE and approved by EPA as protective against unacceptable risks in surface water due to potential migration of constituents in groundwater.

These Performance Standards are to be applied to the results of the individual monitoring wells included in the monitoring program. Certain of the monitoring wells have been selected as the potential compliance points for attainment of the Performance Standards identified above. These wells were identified in the GMA 2 Baseline Monitoring Proposal Addendum and are described further in Sections 4.3.1 (for GW-2 wells) and 4.3.2 (for GW-3 wells).

### **4.3 Groundwater Quality**

For the purpose of generally assessing current groundwater conditions, the analytical results from the spring 2002 groundwater sampling event were compared to the groundwater Performance Standards for GMA 2. These Performance Standards are described in Section 4.2 above, and are currently based (on a well-specific basis) on the MCP Method 1 GW-2 and/or GW-3 standards. The following subsections discuss the spring 2002 groundwater analytical results in relation to these Performance Standards, as well as in relation to the MCP UCLs for groundwater.

#### **4.3.1 Groundwater Results Relative to GW-2 Performance Standards**

Four monitoring wells (GMA2-2, GMA2-3, GMA2-5, and MW-2) at this GMA have been initially designated as GW-2 wells and will be compliance points for the GW-2 standards. The detected results for these wells from

the spring 2002 sampling event and a comparison of those results with the applicable MCP Method 1 GW-2 standards are presented in Table 6. As shown in Table 6, none of the spring 2002 sample concentrations from the GW-2 monitoring wells were above the GW-2 Performance Standards. In addition, none of the GW-2 wells exhibited total VOC concentrations above 5 ppm (the level specified in the SOW as a notification level for GW-2 wells and as a trigger level for the proposal of interim response actions).

#### **4.3.2 Groundwater Results Relative to GW-3 Performance Standards**

Ten monitoring wells at this GMA (i.e., all wells sampled except GMA2-3) have been designated as GW-3 wells. The spring 2002 groundwater analytical results for all detected constituents from these 10 wells and a comparison of those results with MCP Method 1 GW-3 standards are presented in Table 7. Although that table provides a comparison of the spring 2002 analytical results from all 10 of these monitoring wells with the GW-3 standards, only eight of those wells (i.e., the downgradient GW-3 perimeter wells) have been designated as compliance points for the GW-3 standards. These wells are GMA2-2, GMA2-4, GMA2-6, GMA2-7, GMA2-8, GMA2-9, J-1R, and MW-2.

In comparing the baseline monitoring results to the Method 1 GW-3 standards for PCBs and all inorganics (except cyanide), GE has used the results from the filtered samples. EPA has previously agreed to this approach in a letter to GE dated January 2, 2002 (relating to groundwater monitoring for GE's On-Plant Consolidation Areas). Accordingly, the unfiltered sample results were only utilized for comparison to the MCP UCLs.

The comparisons set forth in Table 7 show that for the spring 2002 sampling round at GMA 2, the only constituent detected at levels above the MCP Method 1 GW-3 standard was cyanide. Cyanide was detected in two unfiltered groundwater samples (from upgradient well GMA2-1 at 0.018 ppm and from downgradient well GMA2-9 at 0.017 ppm) at levels above its GW-3 standard (0.01 ppm).

The SOW requires that interim response actions must be proposed for baseline sampling results which exceed the Method 1 GW-3 standards at downgradient perimeter monitoring wells when (a) such an exceedence had not previously been detected, or (b) there was a previous exceedance of the Method 1 GW-3 standard and the groundwater concentration is greater than or equal to 100 times the GW-3 standard (if the exceedance was not previously addressed). These interim response actions may include: (1) further assessment activities, such as resampling, increasing the sampling frequency to quarterly, additional well installation, and/or continuing the

---

baseline monitoring program; (2) active response actions; and/or (3) the conduct of a site-specific risk evaluation and proposal of alternative risk-based GW-3 Performance Standards.

There was one downgradient perimeter well (GMA2-9) where the spring 2002 sampling results for cyanide exceeded its Method 1 GW-3 standard. In this situation, together with the facts that (1) this was only the first round of sampling, (2) the detected level of cyanide at this well was only marginally above its GW-3 standard, (3) the result is from an unfiltered sample, (4) a similar exceedence was also found at one upgradient well, and (5) the exceedences are not widespread across the GMA, GE's proposed response to this exceedence is to continue with the baseline monitoring program. In doing so, however, as further discussed in Section 5.3, GE is proposing to collect and analyze filtered (as well as unfiltered) samples for cyanide analysis to assess the presence of soluble cyanide in groundwater at GMA 2.

#### **4.3.3 Comparison to Upper Concentration Limits**

The spring 2002 groundwater analytical results have also been compared with the groundwater UCLs specified in the MCP. These comparisons are presented in Table 8. As shown in that table, none of the detected constituents exceeded their respective UCL.

## **5. Proposed Program Modifications**

### **5.1 General**

This section contains GE's proposed modifications to future baseline monitoring activities. These activities are based on following a review of data collected during the initial round of the baseline program.

### **5.2 Low-Flow Sampling Procedures**

Groundwater sample turbidities measured during the spring 2002 sampling event were well below acceptable level specified in the FSP/QAPP (50 NTU) in all but two monitoring wells sampled. These results, for the most part, show that the use of submersible, bladder, and/or peristaltic pumps can effectively achieve low-turbidity groundwater samples. Therefore, GE will continue to use these types of pumps as its preferred method to collect water samples for laboratory analysis during future sampling events. At wells with relatively higher turbidities (GMA2-3 and GMA2-7), bladder pumps will be the preferred pumps for sampling. Bailers may still be utilized at certain wells if the quantity of water available is insufficient to utilize a low-flow pumping system. However, bailers will no longer be used to collect VOC samples from wells purged with a peristaltic pump. Rather, all samples will be collected via the same pump used during purging.

At wells where low flow rates (i.e., near 0.1 liter per minute) are necessary to collect samples due to turbidity or low recharge issues, GE will utilize bladder pumps for groundwater sampling to the extent practical. During the turbidity assessment performed in spring 2002 at GMA 1, bladder pumps were found to be the most effective equipment to maintain a consistent flow at the lowest pump rates. Although the other pump types (i.e., submersible and peristaltic) did not perform as well as bladder pumps under all conditions, they were found to be fully capable of collecting low turbidity groundwater samples and will continue to be utilized in future sampling rounds.

### **5.3 Cyanide Analyses**

As discussed in Section 4.3.2, analytical results above the MCP Method 1 GW-3 standard for cyanide were detected in the unfiltered samples collected from wells GMA2-1 and GMA2-9. Since this is the initial semi-annual groundwater sampling event for GMA 2, GE's proposed response at this time is to continue the baseline

---

monitoring program according to its approved schedule. However, in addition to performing analysis of unfiltered samples for cyanide, GE will collect and analyze filtered samples for cyanide as part of future baseline activities in order to assess the presence of soluble cyanide in the groundwater. Collection of unfiltered and filtered samples for cyanide is consistent with the approach used for the other inorganic and PCB analyses.

## **6. Schedule of Future Activities**

---

### **6.1 General**

This section addresses the schedule for future baseline groundwater monitoring activities and reporting for GMA 2, focusing in particular on the fall 2002 monitoring event.

### **6.2 Field Activities Schedule**

GE will continue its routine quarterly water level monitoring program to assess groundwater flow at GMA 2. The summer 2002 round of groundwater-level measurement will be conducted in July 2002. For that and future groundwater elevation monitoring, well MW-3 will no longer be monitored because that well is not part of the baseline program. The results of the summer 2002 round of measurements will be reported in the upcoming Fall 2002 GMA 2 Groundwater Quality Interim Report.

In accordance with the approved semi-annual monitoring schedule, GE anticipates that the fall 2002 sampling event will take place in October 2002. Other than the collection and analysis of filtered samples for cyanide, no changes in the analytical program are proposed at this time. Prior to performance of these activities, GE will provide EPA with 7 days advance notice to allow the assignment of field oversight personnel.

### **6.3 Reporting Schedule**

GE will submit the Fall 2002 Baseline Groundwater Quality Interim Report for GMA 2 by January 31, 2003, in accordance with the previously approved reporting schedule. GE will also continue to provide the results of the quarterly water level measurements and NAPL monitoring efforts in the appropriate monthly reports on overall activities at the GE-Pittsfield/Housatonic River Site.

## ***Tables***

---

**BBL®**  
BLASLAND, BOUCK & LEE, INC.  
*engineers & scientists*

**TABLE 1**  
**GENERAL ELECTRIC COMPANY**  
**PITTSFIELD, MASSACHUSETTS**  
**FORMER OXBOW AREAS J & K GROUNDWATER MANAGEMENT AREA**  
**MONITORING WELL CONSTRUCTION SUMMARY**

Well Number	Survey Coordinates		Well Diameter (inches)	Ground Surface Elevation (feet AMSL)	Measuring Point Elevation (feet AMSL)	Depth to Top of Screen (feet BGS)	Screen Length (feet)	Top of Screen Elevation (feet AMSL)	Base of Screen Elevation (feet AMSL)
	Northing	Easting							
GMA2-1	534402.60	135510.20	2.00	988.30	991.36	13.80	10.00	974.50	964.50
GMA2-2	534264.30	135725.00	2.00	988.10	991.19	12.94	10.00	975.16	965.16
GMA2-3	534303.30	135295.50	2.00	991.59	991.48	8.59	10.00	983.00	973.00
GMA2-4	534167.60	135730.00	2.00	980.30	983.41	5.20	10.00	975.10	965.10
GMA2-5	533956.60	135712.80	2.00	986.11	985.85	5.98	10.00	980.13	970.13
GMA2-6	534296.40	135526.00	2.00	986.30	989.73	10.13	10.00	976.17	966.17
GMA2-7	534452.30	136034.50	2.00	989.84	989.64	8.49	10.00	981.35	971.35
GMA2-8	534235.50	135923.10	2.00	978.70	982.30	4.00	10.00	974.70	964.70
GMA2-9	534006.00	135431.40	2.00	978.10	981.29	4.00	10.00	974.10	964.10
J-1R	534035.60	135266.60	2.00	988.61	988.25	11.55	10.00	977.06	967.06
MW-1	534463.40	136305.70	2.00	990.24	990.03	NA	NA	NA	NA
MW-2	534318.38	136180.30	2.00	991.90	991.63	NA	NA	NA	NA
MW-3	534451.50	136059.70	2.00	994.68	994.47	NA	NA	NA	NA
Staff Gauge	533977.10	135299.50	--	--	971.76	--	--	--	--

NOTES:

1. The listed wells were utilized during fall 2001 for baseline groundwater quality sampling or hydraulic conductivity testing.
2. feet AMSL: feet above mean sea level
3. feet BGS: feet below ground surface
4. -- indicates that a value does not apply.
5. The 0.00-foot mark on the staff gauge corresponds to an elevation of 971.76 feet AMSL.
6. NA indicates that information is not available.

**TABLE 2**  
**GENERAL ELECTRIC COMPANY**  
**PITTSFIELD, MASSACHUSETTS**  
**FORMER OXBOW AREAS J & K GROUNDWATER MANAGEMENT AREA**  
**GROUNDWATER ELEVATION DATA - WINTER AND SPRING 2002**

Well Number	Measuring Point Elevation (feet AMSL)	Date Measured	Depth to Water (feet BMP)	Groundwater Elevation (feet AMSL)
GMA2-1	991.36	1/14/2002	15.61	975.75
		4/12/2002	15.32	976.04
GMA2-2	991.19	1/14/2002	17.80	973.39
		4/12/2002	17.07	974.12
GMA2-3	991.48	1/14/2002	15.88	975.60
		4/12/2002	14.89	976.59
GMA2-4	983.41	1/14/2002	9.38	974.03
		4/12/2002	8.59	974.82
GMA2-5	985.85	1/14/2002	10.46	975.39
		4/12/2002	9.49	976.36
GMA2-6	989.73	1/14/2002	15.69	974.04
		4/12/2002	14.09	975.64
GMA2-7	989.64	1/14/2002	15.45	974.19
		4/12/2002	14.49	975.15
GMA2-8	982.30	1/14/2002	8.71	973.59
		4/12/2002	8.05	974.25
GMA2-9	981.29	1/14/2002	8.10	973.19
		4/12/2002	7.38	973.91
J-1R	988.25	1/14/2002	15.21	973.04
		4/12/2002	14.52	973.73
MW-1	990.03	1/14/2002	12.75	977.28
		4/12/2002	11.82	978.21
MW-2	991.63	1/14/2002	14.48	977.15
		4/12/2002	13.90	977.73
MW-3	994.47	1/14/2002	15.92	978.55
		4/12/2002	14.97	979.50
Staff Gauge	971.76	1/14/2002	1.22	970.54
		4/12/2002	1.82	969.94

Notes:

1. feet AMSL - Feet Above Mean Sea Level
2. feet BMP - Feet Below Measuring Point
3. A Staff Gauge reading of 0.00 feet corresponds to an elevation of 971.76 feet AMSL. The Depth to Water value shown above for this gauge refers to feet above/below (+/-) the datum rather than feet BMP.

**TABLE 3**  
**GENERAL ELECTRIC COMPANY**  
**PITTSFIELD, MASSACHUSETTS**  
**FORMER OXBOW AREAS J & K GROUNDWATER MANAGEMENT AREA**  
**HYDRAULIC CONDUCTIVITY RESULTS**

Well Number	Date Measured	Hydraulic Conductivity		
		(cm/sec)	(ft/min)	(ft/day)
GMA2-1	7/16/2002	3.683E-03	7.250E-03	10.44
GMA2-2	7/16/2002	4.257E-02	8.380E-02	120.67
GMA2-3	7/16/2002	4.328E-03	8.520E-03	12.27
GMA2-4	7/17/2002	1.411E-02	2.778E-02	40.00
GMA2-5	7/17/2002	4.885E-02	9.616E-02	138.47
GMA2-6	7/16/2002	4.922E-02	9.689E-02	139.52
GMA2-7	7/16/2002	3.215E-02	6.329E-02	91.13
GMA2-8	7/17/2002	2.863E-02	5.636E-02	81.16
GMA2-9	7/17/2002	2.816E-03	5.543E-03	7.98
J-1R	7/17/2002	NC	NC	NC

**Notes**

1. Hydraulic conductivities were determined by applying the Bouwer-Rice solution for unconfined aquifers using AQTESOLV software.
2. NC - Not calculated, well J-1R recharged in approximately 5.5 seconds; therefore; an accurate hydraulic conductivity value could not be determined.

**TABLE 4**  
**GENERAL ELECTRIC COMPANY**  
**PITTSFIELD, MASSACHUSETTS**  
**FORMER OXBOW AREAS J & K GROUNDWATER MANAGEMENT AREA**  
**FIELD PARAMETER MEASUREMENTS - SPRING 2002**

Well Number	Turbidity (NTU)	Temperature (degrees Celsius)	pH (Standard Units)	Specific Conductivity (mS/cm)	Oxidation- Reduction Potential (mV)	Dissolved Oxygen (mg/L)
GMA 2-1	32.0	7.60	7.32	0.755	-57	0.92
GMA 2-2	4.0	13.02	7.08	0.742	60	5.78
GMA 2-3	52.0	16.15	6.87	3.780	24	3.49
GMA 2-4	2.0*	8.84	6.91	0.467	-128	0.00
GMA 2-5	2.0	11.32	7.32	0.592	48	7.10
GMA 2-6	17.0	7.95	6.70	2.020	-38	0.00
GMA 2-7	80.0	12.23	6.83	2.390	93	4.30
GMA 2-8	7.0	17.20	7.11	0.397	-124	0.08
GMA 2-9	1.0	10.10	6.45	0.256	69	3.45
J-1R	50.0	11.70	6.71	1.510	63	0.00
MW-1	NM	NM	NM	NM	NM	NM
MW-2	2.0	16.76	6.85	1.020	-102	5.15
MW-3	NM	NM	NM	NM	NM	NM

Notes:

1. Measurements collected during spring 2002 groundwater sampling event performed between April 15 and 17, 2002.
2. Well parameters were monitored continuously during purging by low-flow techniques. Final parameter readings are presented.
3. NTU - Nephelometric Turbidity Units
4. mS/cm - Millisiemens per centimeter
5. mV - Millivolts
6. mg/L - Milligrams per liter (ppm)
7. \* - Turbidity meter appears to have malfunctioned.
8. NM - Not Measured

TABLE 5

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTSFORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA  
GROUNDWATER ANALYTICAL DATA - SPRING 2002

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	GMA2-1 04/15/02	GMA2-2 04/15/02	GMA2-3 04/15/02	GMA2-4 04/17/02	GMA2-5 04/17/02
<b>Volatile Organics</b>						
1,1,1,2-Tetrachloroethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1,1-Trichloroethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1,2,2-Tetrachloroethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1,2-Trichloroethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1-Dichloroethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1-Dichloroethene		ND(0.0010)	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010)
1,2,3-Trichloropropane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,2-Dibromo-3-chloropropane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,2-Dibromoethane		ND(0.0010)	ND(0.0010) [ND(0.0010)]	ND(0.0010)	ND(0.0010)	ND(0.0010)
1,2-Dichloroethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,2-Dichloropropane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,4-Dioxane		ND(0.20)	ND(0.20) [ND(0.20)]	ND(0.20)	ND(0.20) J	ND(0.20) J
2-Butanone		ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010)
2-Chloro-1,3-butadiene		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
2-Chloroethylvinylether		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050) J	ND(0.0050) J
2-Hexanone		ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010)
3-Chloropropene		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
4-Methyl-2-pentanone		ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010)
Acetone		ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010) J	ND(0.010) J
Acetonitrile		ND(0.10)	ND(0.10) [ND(0.10)]	ND(0.10)	ND(0.10) J	ND(0.10) J
Acrolein		ND(0.10)	ND(0.10) [ND(0.10)]	ND(0.10)	ND(0.10) J	ND(0.10) J
Acrylonitrile		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050) J	ND(0.0050) J
Benzene		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Bromodichloromethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Bromoform		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Bromomethane		ND(0.0020)	ND(0.0020) [ND(0.0020)]	ND(0.0020)	ND(0.0020)	ND(0.0020)
Carbon Disulfide		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Carbon Tetrachloride		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chlorobenzene		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chloroethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chloroform		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chloromethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
cis-1,3-Dichloropropene		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Dibromochloromethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Dibromomethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Dichlorodifluoromethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Ethyl Methacrylate		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Ethylbenzene		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Iodomethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Isobutanol		ND(0.10)	ND(0.10) [ND(0.10)]	ND(0.10)	ND(0.10) J	ND(0.10) J
Methacrylonitrile		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Methyl Methacrylate		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Methylene Chloride		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Propionitrile		ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010) J	ND(0.010) J
Styrene		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Tetrachloroethene		ND(0.0020)	0.0018 J [0.0020]	ND(0.0020)	ND(0.0020)	ND(0.0020)
Toluene		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
trans-1,2-Dichloroethene		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
trans-1,3-Dichloropropene		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
trans-1,4-Dichloro-2-butene		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichloroethene		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichlorofluoromethane		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Acetate		ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride		ND(0.0020)	ND(0.0020) [ND(0.0020)]	ND(0.0020)	ND(0.0020)	ND(0.0020)
Xylenes (total)		ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	ND(0.010)	ND(0.010)
Total VOCs		ND(0.20)	0.0018 J [0.0020]	ND(0.20)	ND(0.20)	ND(0.20)

**TABLE 5**  
**GENERAL ELECTRIC COMPANY**  
**PITTSFIELD, MASSACHUSETTS**  
**FORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA**  
**GROUNDWATER ANALYTICAL DATA - SPRING 2002**

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	GMA2-1 04/15/02	GMA2-2 04/15/02	GMA2-3 04/15/02	GMA2-4 04/17/02	GMA2-5 04/17/02
<b>PCBs-Unfiltered</b>						
Aroclor-1016	ND(0.000065)	ND(0.000065) [ND(0.00025)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1221	ND(0.000065)	ND(0.000065) [ND(0.00025)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1232	ND(0.000065)	ND(0.000065) [ND(0.00025)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1242	ND(0.000065)	ND(0.000065) [ND(0.00025)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1248	ND(0.000065)	ND(0.000065) [ND(0.00025)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1254	0.00019	0.000038 J [0.000048 J]	NS	ND(0.000065)	0.000035 J	
Aroclor-1260	ND(0.000065)	ND(0.000065) [0.000026 J]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs	0.00019	0.000038 J [0.000074 J]	NS	ND(0.000065)	0.000035 J	
<b>PCBs-Filtered</b>						
Aroclor-1016	ND(0.000065)	ND(0.000065) [ND(0.000065)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1221	ND(0.000065)	ND(0.000065) [ND(0.000065)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1232	ND(0.000065)	ND(0.000065) [ND(0.000065)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1242	ND(0.000065)	ND(0.000065) [ND(0.000065)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1248	ND(0.000065)	ND(0.000065) [ND(0.000065)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1254	0.000072	ND(0.000065) [ND(0.000065)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1260	ND(0.000065)	ND(0.000065) [ND(0.000065)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs	0.000072	ND(0.000065) [ND(0.000065)]	NS	ND(0.000065)	ND(0.000065)	ND(0.000065)
<b>Semivolatile Organics</b>						
1,2,4,5-Tetrachlorobenzene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
1,2,4-Trichlorobenzene	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)
1,2-Dichlorobenzene	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)
1,2-Diphenylhydrazine	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
1,3,5-Trinitrobenzene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
1,3-Dichlorobenzene	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)
1,3-Dinitrobenzene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
1,4-Dichlorobenzene	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.0050)	ND(0.010)	ND(0.010)	ND(0.010)
1,4-Naphthoquinone	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
1-Naphthylamine	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2,3,4,6-Tetrachlorophenol	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010) J	ND(0.010) J	ND(0.010) J
2,4,5-Trichlorophenol	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2,4,6-Trichlorophenol	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2,4-Dichlorophenol	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2,4-Dimethylphenol	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2,4-Dinitrophenol	ND(0.050)	ND(0.050) [ND(0.050)]	NS	ND(0.050)	ND(0.050)	ND(0.050)
2,4-Dinitrotoluene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2,6-Dichlorophenol	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2,6-Dinitrotoluene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2-Acetylaminofluorene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2-Chloronaphthalene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2-Chlorophenol	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2-Methylnaphthalene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2-Methylphenol	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2-Naphthylamine	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2-Nitroaniline	ND(0.050)	ND(0.050) [ND(0.050)]	NS	ND(0.050)	ND(0.050)	ND(0.050)
2-Nitrophenol	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
2-Picoline	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
3&4-Methylphenol	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
3,3'-Dichlorobenzidine	ND(0.020)	ND(0.020) [ND(0.020)]	NS	ND(0.020)	ND(0.020)	ND(0.020)
3,3'-Dimethylbenzidine	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
3-Methylcholanthrene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
3-Nitroaniline	ND(0.050)	ND(0.050) [ND(0.050)]	NS	ND(0.050)	ND(0.050)	ND(0.050)
4,6-Dinitro-2-methylphenol	ND(0.050)	ND(0.050) [ND(0.050)]	NS	ND(0.050)	ND(0.050)	ND(0.050)
4-Aminobiphenyl	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
4-Bromophenyl-phenylether	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
4-Chloro-3-Methylphenol	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
4-Chloroaniline	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
4-Chlorobenzilate	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010) J	ND(0.010) J	ND(0.010) J
4-Chlorophenyl-phenylether	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
4-Nitroaniline	ND(0.050)	ND(0.050) [ND(0.050)]	NS	ND(0.050)	ND(0.050)	ND(0.050)
4-Nitrophenol	ND(0.050)	ND(0.050) [ND(0.050)]	NS	ND(0.050)	ND(0.050)	ND(0.050)
4-Nitroquinoline-1-oxide	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010) J	ND(0.010) J	ND(0.010) J

TABLE 5

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTSFORMER OXBOWS J & K GROUNDWATER MANAGEMENT AREA  
GROUNDWATER ANALYTICAL DATA - SPRING 2002

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	GMA2-1 04/15/02	GMA2-2 04/15/02	GMA2-3 04/15/02	GMA2-4 04/17/02	GMA2-5 04/17/02
<b>Semivolatile Organics (continued)</b>						
4-Phenylenediamine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010) J	ND(0.010) J
5-Nitro-o-toluidine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
7,12-Dimethylbenz(a)anthracene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
a,a'-Dimethylphenethylamine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Acenaphthene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Acenaphthylene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Acetophenone		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Aniline		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Anthracene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Aromatic		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010) J	ND(0.010) J
Benzidine		ND(0.020)	ND(0.020) [ND(0.020)]	NS	ND(0.020)	ND(0.020)
Benz(a)anthracene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Benz(a)pyrene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Benz(b)fluoranthene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Benz(g,h,i)perylene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Benz(k)fluoranthene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Benzyl Alcohol		ND(0.020)	ND(0.020) [ND(0.020)]	NS	ND(0.020)	ND(0.020)
bis(2-Chloroethoxy)methane		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
bis(2-Chloroethyl)ether		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
bis(2-Chloroisopropyl)ether		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
bis(2-Ethylhexyl)phthalate		ND(0.0060)	ND(0.0060) [ND(0.0060)]	NS	ND(0.0060)	ND(0.0060)
Butylbenzylphthalate		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Chrysene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Diallate		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Dibenzo(a,h)anthracene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Dibenzofuran		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Diethylphthalate		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Dimethoate		ND(0.050)	ND(0.050) [ND(0.050)]	NS	ND(0.050)	ND(0.050)
Dimethylphthalate		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Di-n-Butylphthalate		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Di-n-Octylphthalate		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Diphenylamine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Disulfoton		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Ethyl Methanesulfonate		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Ethyl Parathion		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Famphur		ND(0.050)	ND(0.050) [ND(0.050)]	NS	ND(0.050)	ND(0.050)
Fluoranthene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Fluorene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Hexachlorobenzene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Hexachlorobutadiene		ND(0.0010)	ND(0.0010) [ND(0.0010)]	NS	ND(0.0010)	ND(0.0010)
Hexachlorocyclopentadiene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Hexachloroethane		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Hexachlorophene		ND(0.020)	ND(0.020) [ND(0.020)]	NS	ND(0.020)	ND(0.020)
Hexachloropropene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010) J	ND(0.010) J
Indeno(1,2,3-cd)pyrene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Isodrin		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Isophorone		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Isosafrole		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Kepone		ND(0.050)	ND(0.050) [ND(0.050)]	NS	ND(0.050)	ND(0.050)
Methaphyriene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Methyl Methanesulfonate		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Methyl Parathion		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
Naphthalene		ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.0050)	ND(0.010)	ND(0.010)
Nitrobenzene		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
N-Nitrosodiethylamine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
N-Nitrosodimethylamine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
N-Nitroso-di-n-butylamine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
N-Nitroso-di-n-propylamine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
N-Nitrosodiphenylamine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
N-Nitrosomethylethylamine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
N-Nitrosomorpholine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
N-Nitrosopiperidine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)
N-Nitrosopyrrolidine		ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)

**TABLE 5**  
**GENERAL ELECTRIC COMPANY**  
**PITTSFIELD, MASSACHUSETTS**  
**FORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA**  
**GROUNDWATER ANALYTICAL DATA - SPRING 2002**

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	GMA2-1 04/15/02	GMA2-2 04/15/02	GMA2-3 04/15/02	GMA2-4 04/17/02	GMA2-5 04/17/02
<b>Semivolatile Organics (continued)</b>						
o,o,o-Triethylphosphorothioate	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
p-Toluidine	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
p-Dimethylaminoazobenzene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Pentachlorobenzene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Pentachloroethane	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Pentachloronitrobenzene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010) J	ND(0.010) J	ND(0.010) J
Pentachlorophenol	ND(0.050)	ND(0.050) [ND(0.050)]	NS	ND(0.050)	ND(0.050)	ND(0.050)
Phenacetin	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Phenanthrene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Phenol	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Phorate	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Pronamide	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Pyrene	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Pyridine	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Safrole	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Sulfotep	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Thionazin	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
<b>Organochlorine Pesticides</b>						
4,4'-DDD	ND(0.00010)	ND(0.00010) [ND(0.00010)]	NS	ND(0.00010)	ND(0.00010)	ND(0.00010)
4,4'-DDE	ND(0.00010)	ND(0.00010) [ND(0.00010)]	NS	ND(0.00010)	ND(0.00010)	ND(0.00010)
4,4'-DDT	ND(0.00010)	ND(0.00010) [ND(0.00010)]	NS	ND(0.00010)	ND(0.00010)	ND(0.00010)
Aldrin	ND(0.000050)	ND(0.000050) [ND(0.000050)]	NS	ND(0.000050)	ND(0.000050)	ND(0.000050)
Alpha-BHC	ND(0.000050)	ND(0.000050) [ND(0.000050)]	NS	ND(0.000050)	ND(0.000050)	ND(0.000050)
Alpha-Chlordane	ND(0.000050)	ND(0.000050) [ND(0.000050)]	NS	ND(0.000050)	ND(0.000050)	ND(0.000050)
Beta-BHC	ND(0.000050)	ND(0.000050) [ND(0.000050)]	NS	ND(0.000050)	ND(0.000050)	ND(0.000050)
Delta-BHC	ND(0.000050)	ND(0.000050) [ND(0.000050)]	NS	ND(0.000050)	ND(0.000050)	ND(0.000050)
Dieldrin	ND(0.00010)	ND(0.00010) [ND(0.00010)]	NS	ND(0.000050)	ND(0.000050)	ND(0.000050)
Endosulfan I	ND(0.00010)	ND(0.00010) [ND(0.00010)]	NS	ND(0.00010)	ND(0.00010)	ND(0.00010)
Endosulfan II	ND(0.00010)	ND(0.00010) [ND(0.00010)]	NS	ND(0.00010)	ND(0.00010)	ND(0.00010)
Endosulfan Sulfate	ND(0.00010)	ND(0.00010) [ND(0.00010)]	NS	ND(0.00010)	ND(0.00010)	ND(0.00010)
Endrin	ND(0.00010)	ND(0.00010) [ND(0.00010)]	NS	ND(0.00010)	ND(0.00010)	ND(0.00010)
Endrin Aldehyde	ND(0.00010)	ND(0.00010) [ND(0.00010)]	NS	ND(0.00010)	ND(0.00010)	ND(0.00010)
Endrin Ketone	ND(0.00010)	ND(0.00010) [ND(0.00010)]	NS	ND(0.00010)	ND(0.00010)	ND(0.00010)
Gamma-BHC (Lindane)	ND(0.000050)	ND(0.000050) [ND(0.000050)]	NS	ND(0.000050)	ND(0.000050)	ND(0.000050)
Gamma-Chlordane	ND(0.000050)	ND(0.000050) [ND(0.000050)]	NS	ND(0.000050)	ND(0.000050)	ND(0.000050)
Heptachlor	ND(0.000050)	ND(0.000050) [ND(0.000050)]	NS	ND(0.000050)	ND(0.000050)	ND(0.000050)
Heptachlor Epoxyde	ND(0.000050)	ND(0.000050) [ND(0.000050)]	NS	ND(0.000050)	ND(0.000050)	ND(0.000050)
Methoxychlor	ND(0.00050)	ND(0.00050) [ND(0.00050)]	NS	ND(0.00050)	ND(0.00050)	ND(0.00050)
Technical Chlordane	ND(0.00050)	ND(0.00050) [ND(0.00050)]	NS	ND(0.00050)	ND(0.00050)	ND(0.00050)
Toxaphene	ND(0.0010)	ND(0.0010) [ND(0.0010)]	NS	ND(0.0010)	ND(0.0010)	ND(0.0010)
<b>Herbicides</b>						
2,4,5-T	ND(0.0020)	ND(0.0020) [ND(0.0020)]	NS	ND(0.0020)	ND(0.0020)	ND(0.0020)
2,4,5-TP	ND(0.0020)	ND(0.0020) [ND(0.0020)]	NS	ND(0.0020)	ND(0.0020)	ND(0.0020)
2,4-D	ND(0.010)	ND(0.010) [ND(0.010)]	NS	ND(0.010)	ND(0.010)	ND(0.010)
Dinoseb	ND(0.0010)	ND(0.0010) [ND(0.0010)]	NS	ND(0.0010)	ND(0.0010)	ND(0.0010)
<b>Furans</b>						
2,3,7,8-TCDF	0.0000000055 J	ND(0.000000012) [0.000000014 J]	NS	ND(0.000000017) X	ND(0.000000060)	
TCDFs (total)	ND(0.000000012) X	ND(0.000000012) [0.000000014]	NS	ND(0.000000017) X	ND(0.000000060)	
1,2,3,7,8-PeCDF	ND(0.000000037) X	ND(0.000000013) [0.0000000050 JB]	NS	ND(0.000000060) X	ND(0.000000070)	
2,3,4,7,8-PeCDF	0.0000000063 J	ND(0.000000012) [ND(0.000000049) X]	NS	ND(0.000000069) X	ND(0.000000016) X	
PeCDFs (total)	ND(0.000000020) X	ND(0.000000013) [0.000000050]	NS	ND(0.000000013) X	ND(0.000000016) X	
1,2,3,4,7,8-HxCDF	0.0000000055 JB	ND(0.000000011) [0.0000000034 JB]	NS	0.0000000075 JB	0.0000000021 JB	
1,2,3,6,7,8-HxCDF	0.0000000033 J	ND(0.000000011) [0.0000000031 J]	NS	0.0000000047 J	ND(0.0000000060)	
1,2,3,7,8,9-HxCDF	0.0000000039 JB	ND(0.000000013) [0.0000000038 JB]	NS	0.0000000012 J	ND(0.0000000070)	
2,3,4,6,7,8-HxCDF	ND(0.000000012)	ND(0.000000011) [0.0000000026 J]	NS	0.0000000073 J	ND(0.0000000060)	
HxCDFs (total)	0.0000000035	ND(0.000000012) [0.000000013]	NS	0.0000000032	0.0000000021	
1,2,3,4,6,7,8-HpCDF	ND(0.0000000065) X	ND(0.000000014) [0.0000000034 J]	NS	ND(0.0000000045) X	ND(0.0000000070)	
1,2,3,4,7,8,9-HpCDF	0.0000000028 J	ND(0.0000000017) [0.0000000021 J]	NS	0.0000000092 J	ND(0.0000000090)	
HpCDFs (total)	0.0000000090	ND(0.0000000015) [0.0000000055]	NS	0.0000000092	ND(0.0000000080)	
OCDF	ND(0.0000000094) X	ND(0.0000000027) [0.0000000029 J]	NS	ND(0.0000000015) X	ND(0.0000000018)	

TABLE 5  
 GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
 FORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA  
 GROUNDWATER ANALYTICAL DATA - SPRING 2002

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	GMA2-1 04/15/02	GMA2-2 04/15/02	GMA2-3 04/15/02	GMA2-4 04/17/02	GMA2-5 04/17/02
<b>Dioxins</b>						
2,3,7,8-TCDD		ND(0.0000000015)	ND(0.0000000015) [ND(0.0000000013) X]	NS	ND(0.0000000019) X	ND(0.00000000080)
TCDDs (total)		ND(0.0000000015)	ND(0.0000000015) [ND(0.0000000013) X]	NS	ND(0.0000000019) X	ND(0.00000000080)
1,2,3,7,8-PeCDD		ND(0.0000000030) X	ND(0.0000000014) [0.0000000032 J]	NS	0.0000000076 J	ND(0.00000000080)
PeCDDs (total)		ND(0.0000000030) X	ND(0.0000000014) [0.0000000032]	NS	0.0000000076	ND(0.00000000080)
1,2,3,4,7,8-HxCDD		ND(0.0000000018)	ND(0.0000000015) [0.0000000029 J]	NS	0.0000000057 J	ND(0.00000000090)
1,2,3,6,7,8-HxCDD		ND(0.0000000018)	ND(0.0000000016) [0.0000000035 J]	NS	0.0000000068 J	ND(0.00000000090)
1,2,3,7,8,9-HxCDD		ND(0.0000000018)	ND(0.0000000015) [0.0000000036 J]	NS	0.000000012 J	ND(0.00000000090)
HxCDDs (total)		ND(0.0000000018)	ND(0.0000000015) [0.0000000010]	NS	0.000000025	ND(0.00000000090)
1,2,3,4,6,7,8-HpCDD		ND(0.0000000037) X	ND(0.0000000025) [0.0000000020 J]	NS	ND(0.0000000079) X	ND(0.0000000012)
HpCDDs (total)		ND(0.0000000037) X	ND(0.0000000025) [0.0000000020]	NS	ND(0.0000000079) X	ND(0.0000000012)
OCDD		0.000000017 J	0.0000000053 J [ND(0.0000000054) X]	NS	ND(0.0000000020)	ND(0.0000000044) X
Total TEQ (WHO TEFs)		0.0000000077	0.0000000023 [0.0000000078]	NS	0.0000000016	0.0000000017
<b>Inorganics-Unfiltered</b>						
Antimony		ND(0.0600)	ND(0.0600) [ND(0.0600)]	NS	ND(0.0600)	ND(0.0600)
Arsenic		ND(0.0100)	ND(0.0100) [ND(0.0100)]	NS	ND(0.0100)	ND(0.0100)
Barium		ND(0.200)	ND(0.200) [ND(0.200)]	NS	ND(0.200)	ND(0.200)
Beryllium		ND(0.00100)	ND(0.00100) [ND(0.00100)]	NS	ND(0.00100)	ND(0.00100)
Cadmium		ND(0.00500)	ND(0.00500) [ND(0.00500)]	NS	ND(0.00500)	ND(0.00500)
Chromium		ND(0.0100)	ND(0.0100) [ND(0.0100)]	NS	ND(0.0100)	ND(0.0100)
Cobalt		ND(0.0500)	ND(0.0500) [ND(0.0500)]	NS	ND(0.0500)	ND(0.0500)
Copper		ND(0.0250)	ND(0.0250) [ND(0.0250)]	NS	ND(0.0250)	ND(0.0250)
Cyanide		0.0180	ND(0.0100) [ND(0.0100)]	NS	ND(0.0100)	ND(0.0100)
Lead		ND(0.00300)	ND(0.00300) [ND(0.00300)]	NS	ND(0.00300)	ND(0.00300)
Mercury		ND(0.000200)	ND(0.000200) [ND(0.000200)]	NS	ND(0.000200)	ND(0.000200)
Nickel		ND(0.0400)	ND(0.0400) [ND(0.0400)]	NS	ND(0.0400)	ND(0.0400)
Selenium		ND(0.00500)	ND(0.00500) [ND(0.00500)]	NS	ND(0.00500)	ND(0.00500)
Silver		ND(0.00500)	ND(0.00500) [ND(0.00500)]	NS	ND(0.00500)	ND(0.00500)
Sulfide		ND(5.00)	ND(5.00) [ND(5.00)]	NS	ND(5.00)	ND(5.00)
Thallium		ND(0.0100)	ND(0.0100) [ND(0.0100)]	NS	ND(0.0100) J	ND(0.0100) J
Tin		ND(0.0300)	ND(0.0300) [ND(0.0300)]	NS	ND(0.0300)	ND(0.0300)
Vanadium		ND(0.0500)	ND(0.0500) [ND(0.0500)]	NS	ND(0.0500)	ND(0.0500)
Zinc		0.0120 B	0.00640 B [0.0130 B]	NS	ND(0.0200)	0.00800 B
<b>Inorganics-Filtered</b>						
Antimony		ND(0.0600)	ND(0.0600) [ND(0.0600)]	NS	ND(0.0600)	ND(0.0600)
Arsenic		ND(0.100)	ND(0.100) [ND(0.100)]	NS	ND(0.100)	ND(0.100)
Barium		ND(0.200)	ND(0.200) [ND(0.200)]	NS	ND(0.200)	ND(0.200)
Beryllium		ND(0.00100)	ND(0.00100) [ND(0.00100)]	NS	ND(0.00100)	ND(0.00100)
Cadmium		ND(0.0100)	ND(0.0100) [ND(0.0100)]	NS	ND(0.0100)	ND(0.0100)
Chromium		ND(0.0250)	ND(0.0250) [ND(0.0250)]	NS	ND(0.0250)	ND(0.0250)
Cobalt		ND(0.0500)	ND(0.0500) [ND(0.0500)]	NS	ND(0.0500)	ND(0.0500)
Copper		0.00450 B	ND(0.100) [ND(0.100)]	NS	ND(0.100)	ND(0.100)
Lead		ND(0.00300)	ND(0.00300) [ND(0.00300)]	NS	ND(0.00300)	ND(0.00300)
Mercury		ND(0.000200)	ND(0.000200) [ND(0.000200)]	NS	ND(0.000200)	ND(0.000200)
Nickel		ND(0.0400)	ND(0.0400) [ND(0.0400)]	NS	ND(0.0400)	ND(0.0400)
Selenium		ND(0.00500)	ND(0.00500) [ND(0.00500)]	NS	ND(0.00500)	ND(0.00500)
Silver		ND(0.00500)	ND(0.00500) [ND(0.00500)]	NS	ND(0.00500)	ND(0.00500)
Thallium		ND(0.0100)	ND(0.0100) [ND(0.0100)]	NS	ND(0.0100) J	ND(0.0100) J
Tin		ND(0.0300)	ND(0.0300) [ND(0.0300)]	NS	ND(0.0300)	ND(0.0300)
Vanadium		ND(0.0500)	0.00380 B [0.00370 B]	NS	ND(0.0500)	ND(0.0500)
Zinc		0.0120 B	ND(0.0200) [ND(0.0200)]	NS	ND(0.0200)	ND(0.0200)

TABLE 5  
 GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
 FORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA  
 GROUNDWATER ANALYTICAL DATA - SPRING 2002

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	GMA2-6 04/15/02	GMA2-7 04/15/02	GMA2-8 04/16/02	GMA2-9 04/17/02	J-1R 04/15/02	OJ-MW-2 04/15/02
<b>Volatile Organics</b>							
1,1,1,2-Tetrachloroethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1,1-Trichloroethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1,2,2-Tetrachloroethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1,2-Trichloroethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1-Dichloroethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,1-Dichloroethene		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)
1,2,3-Trichloropropane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,2-Dibromo-3-chloropropane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,2-Dibromoethane		ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)
1,2-Dichloroethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,2-Dichloropropane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
1,4-Dioxane		ND(0.20)	ND(0.20)	ND(0.20) J	ND(0.20) J	ND(0.20)	ND(0.20)
2-Butanone		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2-Chloro-1,3-butadiene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
2-Chloroethylvinylether		ND(0.0050)	ND(0.0050)	ND(0.0050) J	ND(0.0050) J	ND(0.0050)	ND(0.0050)
2-Hexanone		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
3-Chloropropene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.010)
4-Methyl-2-pentanone		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.0050)
Acetone		ND(0.010)	ND(0.010)	ND(0.010) J	ND(0.010) J	ND(0.010)	ND(0.010)
Acetonitrile		ND(0.10)	ND(0.10)	ND(0.10) J	ND(0.10) J	ND(0.10)	ND(0.10)
Acrolein		ND(0.10)	ND(0.10)	ND(0.10) J	ND(0.10) J	ND(0.10)	ND(0.10)
Acrylonitrile		ND(0.0050)	ND(0.0050)	ND(0.0050) J	ND(0.0050) J	ND(0.0050)	ND(0.0050)
Benzene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Bromodichloromethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Bromoform		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Bromomethane		ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)
Carbon Disulfide		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Carbon Tetrachloride		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chlorobenzene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chloroethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chloroform		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Chloromethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
cis-1,3-Dichloropropene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Dibromochloromethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Dibromomethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Dichlorodifluoromethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Ethyl Methacrylate		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Ethylbenzene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Iodomethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Isobutanol		ND(0.10)	ND(0.10)	ND(0.10) J	ND(0.10) J	ND(0.10)	ND(0.10)
Methacrylonitrile		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Methyl Methacrylate		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Methylene Chloride		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Propionitrile		ND(0.010)	ND(0.010)	ND(0.010) J	ND(0.010) J	ND(0.010)	ND(0.010)
Styrene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Tetrachloroethene		ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)
Toluene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
trans-1,2-Dichloroethene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
trans-1,3-Dichloropropene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
trans-1,4-Dichloro-2-butene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichloroethene		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Trichlorofluoromethane		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	0.0032 J	0.0029 J
Vinyl Acetate		ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Vinyl Chloride		ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0050)	ND(0.0050)
Xylenes (total)		ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.020)	ND(0.020)
Total VOCs		ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	0.0032 J	0.0029 J

TABLE 5

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTSFORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA  
GROUNDWATER ANALYTICAL DATA - SPRING 2002

(Results are presented in parts per million, ppm)

Parameter	Sample ID; Date Collected:	GMA2-6 04/15/02	GMA2-7 04/15/02	GMA2-8 04/16/02	GMA2-9 04/17/02	J-1R 04/15/02	OJ-MW-2 04/15/02
<b>PCBs-Unfiltered</b>							
Aroclor-1016	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1221	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1232	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1242	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1248	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1254	ND(0.000065)	ND(0.000065)	ND(0.000065)	0.000054 J	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1260	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	0.000031 J	ND(0.000065)
Total PCBs	ND(0.000065)	ND(0.000065)	ND(0.000065)	0.000054 J	ND(0.000065)	0.000031 J	ND(0.000065)
<b>PCBs-Filtered</b>							
Aroclor-1016	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1221	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1232	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1242	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1248	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1254	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1260	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
<b>Semivolatile Organics</b>							
1,2,4,5-Tetrachlorobenzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
1,2,4-Trichlorobenzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
1,2-Dichlorobenzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
1,2-Diphenylhydrazine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
1,3,5-Trinitrobenzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
1,3-Dichlorobenzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
1,3-Dinitrobenzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
1,4-Dichlorobenzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
1,4-Naphthoquinone	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
1-Naphthylamine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2,3,4,6-Tetrachlorophenol	ND(0.010)	ND(0.010)	ND(0.010) J	ND(0.010) J	ND(0.010)	ND(0.010)	ND(0.010)
2,4,5-Trichlorophenol	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2,4,6-Trichlorophenol	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2,4-Dichlorophenoxy	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2,4-Dimethylphenol	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2,4-Dinitrophenol	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
2,4-Dinitrotoluene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2,6-Dichlorophenoxy	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2,6-Dinitrotoluene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2-Acetylaminofluorene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2-Chloronaphthalene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2-Chlorophenol	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2-Methylnaphthalene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2-Methylphenol	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2-Naphthylamine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2-Nitroaniline	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
2-Nitrophenol	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
2-Picoline	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
3&4-Methylphenol	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
3,3'-Dichlorobenzidine	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
3,3'-Dimethylbenzidine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
3-Methylcholanthrene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
3-Nitroaniline	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
4,6-Dinitro-2-methylphenol	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
4-Aminobiphenyl	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
4-Bromophenyl-phenylether	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
4-Chloro-3-Methylphenol	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
4-Chloroaniline	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
4-Chlorobenzilate	ND(0.010)	ND(0.010)	ND(0.010) J	ND(0.010) J	ND(0.010)	ND(0.010)	ND(0.010)
4-Chlorophenyl-phenylether	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
4-Nitroaniline	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
4-Nitrophenol	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
4-Nitroquinoline-1-oxide	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010) J	ND(0.010) J	ND(0.010)	ND(0.010)

**TABLE 5**  
**GENERAL ELECTRIC COMPANY**  
**PITTSFIELD, MASSACHUSETTS**  
**FORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA**  
**GROUNDWATER ANALYTICAL DATA - SPRING 2002**

(Results are presented in parts per million, ppm)

Sample ID: Parameter	GMA2-6 Date Collected: 04/15/02	GMA2-7 04/15/02	GMA2-8 04/16/02	GMA2-9 04/17/02	J-1R 04/15/02	OJ-MW-2 04/15/02
<b>Semivolatile Organics (continued)</b>						
4-Phenylenediamine	ND(0.010)	ND(0.010)	ND(0.010) J	ND(0.010) J	ND(0.010)	ND(0.010)
5-Nitro-o-toluidine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
7,12-Dimethylbenz(a)anthracene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
a,a'-Dimethylphenethylamine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Acenaphthene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Acenaphthylene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Acetophenone	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Aniline	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Anthracene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Aramite	ND(0.010)	ND(0.010)	ND(0.010) J	ND(0.010) J	ND(0.010)	ND(0.010)
Benzidine	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Benzo(a)anthracene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Benzo(a)pyrene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Benzo(b)fluoranthene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Benzo(g,h,i)perylene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Benzo(k)fluoranthene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Benzyl Alcohol	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
bis(2-Chloroethoxy)methane	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
bis(2-Chloroethyl)ether	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
bis(2-Chloroisopropyl)ether	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
bis(2-Ethylhexyl)phthalate	ND(0.0060)	ND(0.0060)	ND(0.0060)	ND(0.0060)	ND(0.0060)	ND(0.0060)
Butylbenzylphthalate	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Chrysene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Diallate	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Dibenzo(a,h)anthracene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Dibenzofuran	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Diethylphthalate	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Dimethoate	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
Dimethylphthalate	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Di-n-Butylphthalate	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Di-n-Octylphthalate	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Diphenylamine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Disulfoton	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Ethyl Methanesulfonate	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Ethyl Parathion	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Famphur	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
Fluoranthene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Fluorene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Hexachlorobenzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Hexachlorobutadiene	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)
Hexachlorocyclopentadiene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Hexachloroethane	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Hexachlorophene	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)	ND(0.020)
Hexachloropropene	ND(0.010)	ND(0.010)	ND(0.010) J	ND(0.010) J	ND(0.010)	ND(0.010)
Indeno(1,2,3-cd)pyrene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Isodrin	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Isophorone	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Iosasafrole	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Kepone	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
Methaphyriene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Methyl Methanesulfonate	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Methyl Parathion	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Naphthalene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Nitrobenzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosodiethylamine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosodimethylamine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
N-Nitroso-di-n-butylamine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
N-Nitroso-di-n-propylamine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosodiphenylamine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosomethylethylamine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosomorpholine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosopiperidine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
N-Nitrosopyrrolidine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)

(See Notes on Page 11)

V\GE\_GMA\_24102Tb15.xls

TABLE 5

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTSFORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA  
GROUNDWATER ANALYTICAL DATA - SPRING 2002

(Results are presented in parts per million, ppm)

Sample ID: Parameter	GMA2-6 04/15/02	GMA2-7 04/15/02	GMA2-8 04/16/02	GMA2-9 04/17/02	J-1R 04/15/02	OJ-MW-2 04/15/02
<b>Semivolatile Organics (continued)</b>						
o,o,o-Triethylphosphorothioate	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
o-Toluidine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
p-Dimethylaminobenzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Pentachlorobenzene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Pentachloroethane	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Pentachloronitrobenzene	ND(0.010)	ND(0.010)	ND(0.010) J	ND(0.010) J	ND(0.010)	ND(0.010)
Pentachlorophenol	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)	ND(0.050)
Phenacetin	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Phenanthrene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Phenol	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Phorate	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Pronamide	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Pyrene	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Pyridine	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Safrole	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Sulfotep	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Thioniazin	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
<b>Organochlorine Pesticides</b>						
4,4'-DDD	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)
4,4'-DDE	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)
4,4'-DDT	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)
Aldrin	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)
Alpha-BHC	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)
Alpha-Chlordane	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)
Beta-BHC	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)
Delta-BHC	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)
Dieldrin	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)
Endosulfan I	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)
Endosulfan II	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)
Endosulfan Sulfate	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)
Endrin	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)
Endrin Aldehyde	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)
Endrin Ketone	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)	ND(0.00010)
Gamma-BHC (Lindane)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)
Gamma-Chlordane	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)
Heptachlor	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)
Heptachlor Epoxide	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)	ND(0.000050)
Methoxychlor	ND(0.00050)	ND(0.00050)	ND(0.00050)	ND(0.00050)	ND(0.00050)	ND(0.00050)
Technical Chlordane	ND(0.00050)	ND(0.00050)	ND(0.00050)	ND(0.00050)	ND(0.00050)	ND(0.00050)
Toxaphene	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)
<b>Herbicides</b>						
2,4,5-T	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)
2,4,5-TP	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)
2,4-D	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Dinoseb	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)
<b>Furans</b>						
2,3,7,8-TCDF	ND(0.0000000016) X	ND(0.0000000011)	ND(0.0000000090)	ND(0.0000000011)	ND(0.0000000013)	0.0000000051 J
TCDFs (total)	ND(0.0000000016) X	ND(0.0000000011)	ND(0.0000000015) X	ND(0.0000000011)	ND(0.0000000013)	0.0000000051
1,2,3,7,8-PeCDF	0.0000000046 JB	ND(0.0000000025) X	ND(0.0000000011)	ND(0.0000000010)	ND(0.0000000010) X	0.0000000014 JB
2,3,4,7,8-PeCDF	ND(0.0000000039) X	ND(0.0000000025) X	ND(0.0000000024) X	ND(0.0000000010)	ND(0.0000000021) X	ND(0.0000000095) X
PeCDFs (total)	0.0000000046	ND(0.0000000051) X	ND(0.0000000024) X	ND(0.0000000010)	ND(0.0000000031) X	0.0000000014
1,2,3,4,7,8-HxCDF	0.0000000047 JB	ND(0.0000000026) X	ND(0.0000000031) X	ND(0.0000000090)	0.0000000035 JB	0.0000000012 JB
1,2,3,6,7,8-HxCDF	0.0000000034 J	0.0000000030 J	ND(0.0000000022) X	ND(0.0000000090)	0.0000000034 J	0.0000000098 J
1,2,3,7,8,9-HxCDF	0.0000000037 JB	0.0000000042 JB	0.0000000050 J	ND(0.0000000011)	0.0000000038 JB	ND(0.0000000078) X
2,3,4,6,7,8-HxCDF	0.0000000032 J	0.0000000029 J	0.0000000030 J	ND(0.0000000010)	0.0000000022 J	0.0000000077 J
HxCDFs (total)	0.0000000015	0.0000000010	0.0000000080	ND(0.0000000010)	0.0000000013	0.0000000029
1,2,3,4,6,7,8-HpCDF	0.0000000032 J	0.0000000024 J	ND(0.0000000015) X	ND(0.0000000011)	ND(0.0000000023) X	ND(0.0000000090) X
1,2,3,4,7,8,9-HpCDF	ND(0.0000000027)	ND(0.0000000025) X	ND(0.0000000017)	ND(0.0000000014)	0.0000000030 J	0.0000000010 J
HpCDFs (total)	0.0000000032	0.0000000024	ND(0.0000000015) X	ND(0.0000000012)	0.0000000030	0.0000000014
OCDF	ND(0.0000000054)	ND(0.0000000042) X	ND(0.0000000035)	ND(0.0000000020)	0.0000000063 J	0.0000000027 J

**TABLE 5**  
**GENERAL ELECTRIC COMPANY**  
**PITTSFIELD, MASSACHUSETTS**  
**FORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA**  
**GROUNDWATER ANALYTICAL DATA - SPRING 2002**

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	GMA2-6 04/15/02	GMA2-7 04/15/02	GMA2-8 04/16/02	GMA2-9 04/17/02	J-1R 04/15/02	OJ-MW-2 04/15/02
<b>Dioxins</b>							
2,3,7,8-TCDD	ND(0.0000000022)	ND(0.0000000016)	0.0000000025 J	ND(0.0000000014)	ND(0.0000000017)	0.0000000040 J	
TCDDs (total)	ND(0.0000000022)	ND(0.0000000016)	0.0000000025	ND(0.0000000014)	ND(0.0000000017)	0.0000000040	
1,2,3,7,8-PeCDD	ND(0.0000000040) X	0.0000000030 J	ND(0.0000000052) X	ND(0.0000000011)	0.0000000029 J	0.0000000010 J	
PeCDDs (total)	ND(0.0000000040) X	0.0000000030	ND(0.0000000052) X	ND(0.0000000016) X	0.0000000029	0.0000000010	
1,2,3,4,7,8-HxCDD	0.0000000029 J	0.0000000017 J	ND(0.0000000015)	ND(0.0000000011)	0.0000000037 J	ND(0.0000000068) X	
1,2,3,6,7,8-HxCDD	ND(0.0000000026)	ND(0.0000000015)	ND(0.0000000015)	ND(0.0000000011)	0.0000000028 J	ND(0.0000000089) X	
1,2,3,7,8,9-HxCDD	0.0000000033 J	ND(0.0000000025) X	ND(0.0000000016) X	ND(0.0000000011)	ND(0.0000000026) X	ND(0.0000000037) X	
HxCDDs (total)	0.0000000063	0.0000000017	ND(0.0000000016) X	ND(0.0000000011)	0.0000000065	ND(0.0000000019) X	
1,2,3,4,6,7,8-HpCDD	ND(0.0000000042)	0.0000000030 J	ND(0.0000000021)	ND(0.0000000018)	ND(0.0000000019) X	0.0000000012 J	
HpCDDs (total)	ND(0.0000000042)	0.0000000030	ND(0.0000000021)	ND(0.0000000018)	ND(0.0000000019) X	0.0000000012	
OCDD	0.0000000079 J	0.0000000076 J	ND(0.0000000015)	ND(0.0000000059) X	ND(0.0000000078) X	0.0000000039 J	
Total TEQ (WHO TEFs)	0.0000000067	0.0000000061	0.0000000071	0.0000000020	0.0000000065	0.0000000022	
<b>Inorganics-Unfiltered</b>							
Antimony	ND(0.0600)	ND(0.0600)	ND(0.0600)	ND(0.0600)	ND(0.0600)	ND(0.0600)	
Arsenic	ND(0.0100)	ND(0.0100)	ND(0.0100)	ND(0.0100)	ND(0.0100)	ND(0.0100)	
Barium	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	
Beryllium	ND(0.00100)	ND(0.00100)	ND(0.00100)	ND(0.00100)	ND(0.00100)	ND(0.00100)	
Cadmium	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	
Chromium	ND(0.0100)	ND(0.0100)	ND(0.0100)	ND(0.0100)	ND(0.0100)	ND(0.0100)	
Cobalt	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	
Copper	ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	
Cyanide	0.00490 B	0.00240 B	0.00530 B	0.0170	0.00320 B	0.00320 B	
Lead	ND(0.00300)	ND(0.00300)	ND(0.00300)	ND(0.00300)	ND(0.00300)	ND(0.00300)	
Mercury	ND(0.000200)	ND(0.000200)	ND(0.000200)	ND(0.000200)	ND(0.000200)	ND(0.000200)	
Nickel	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	
Selenium	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	
Silver	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	
Sulfide	ND(5.00)	ND(5.00)	ND(5.00)	ND(5.00)	ND(5.00)	ND(5.00)	
Thallium	ND(0.0100)	ND(0.0100)	ND(0.0100) J	ND(0.0100) J	ND(0.0100)	ND(0.0100)	
Tin	ND(0.0300)	ND(0.0300)	ND(0.0300)	ND(0.0300)	ND(0.0300)	ND(0.0300)	
Vanadium	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	
Zinc	0.0200 B	0.0240	ND(0.0200)	ND(0.0200)	0.0110 B	0.0360	
<b>Inorganics-Filtered</b>							
Antimony	ND(0.0600)	ND(0.0600)	ND(0.0600)	ND(0.0600)	ND(0.0600)	ND(0.0600)	
Arsenic	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	
Barium	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	ND(0.200)	
Beryllium	ND(0.00100)	ND(0.00100)	ND(0.00100)	ND(0.00100)	ND(0.00100)	ND(0.00100)	
Cadmium	ND(0.0100)	ND(0.0100)	ND(0.0100)	ND(0.0100)	ND(0.0100)	ND(0.0100)	
Chromium	ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	
Cobalt	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	
Copper	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	
Lead	ND(0.00300)	ND(0.00300)	ND(0.00300)	ND(0.00300)	ND(0.00300)	ND(0.00300)	
Mercury	ND(0.000200)	ND(0.000200)	ND(0.000200)	ND(0.000200)	ND(0.000200)	ND(0.000200)	
Nickel	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	ND(0.0400)	
Selenium	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	
Silver	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	ND(0.00500)	
Thallium	ND(0.0100)	ND(0.0100)	ND(0.0100) J	ND(0.0100) J	ND(0.0100)	ND(0.0100)	
Tin	ND(0.0300)	ND(0.0300)	ND(0.0300)	ND(0.0300)	ND(0.0300)	ND(0.0300)	
Vanadium	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	
Zinc	ND(0.0200)	ND(0.0200)	0.0120 B	0.00540 B	0.00680 B	0.0110 B	

**TABLE 5**  
**GENERAL ELECTRIC COMPANY**  
**PITTSFIELD, MASSACHUSETTS**  
**FORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA**  
**GROUNDWATER ANALYTICAL DATA - SPRING 2002**

(Results are presented in parts per million, ppm)

**Notes:**

1. Samples were collected by Blasland Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of PCBs and Appendix IX + 3 constituents.
2. Data validation has been performed on data set as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved October 17, 2000).
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. NS - Not Sampled - Parameter was not requested on sample chain of custody form.
5. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998.
6. Duplicate sample results are presented in brackets.

**Data Qualifiers:**

Organics (volatiles, PCBs, semi-volatiles, pesticides, herbicides, dioxin/furans)

B - Analyte was also detected in the associated method blank.

J - Indicates that the associated numerical value is an estimated concentration.

X - Estimated maximum possible concentration.

**Inorganics**

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

TABLE 6

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTSFORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA  
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 1 GW-2 STANDARDS

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	Method 1 GW-2 Standards	GMA2-2 04/15/02	GMA2-3 04/15/02	GMA2-5 04/17/02	OJ-MW-2 04/15/02
<b>Volatile Organics</b>						
Tetrachloroethene	3	0.0018 J [0.0020]	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)
Trichloroethene	0.3	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)	0.0029 J
Total VOCs	5	0.0018 J [0.0020]	ND(0.20)	ND(0.20)	ND(0.20)	0.0029 J
<b>PCBs-Unfiltered</b>						
Aroclor-1254	Not Listed	0.000038 J [0.000048 J]	NS	0.000035 J	ND(0.000065)	ND(0.000065)
Aroclor-1260	Not Listed	ND(0.000065) [0.000026 J]	NS	ND(0.000065)	ND(0.00031 J)	0.000031 J
Total PCBs	Not Listed	0.000038 J [0.000074 J]	NS	0.000035 J	ND(0.00031 J)	0.000031 J
<b>PCBs-Filtered</b>						
Aroclor-1254	Not Listed	[ND(0.000065)]	NS	NS	NS	NS
Aroclor-1260	Not Listed	[ND(0.000065)]	NS	NS	NS	NS
Total PCBs	Not Listed	[ND(0.000065)]	NS	NS	NS	NS
<b>Semivolatile Organics</b>						
None Detected	--	--	NS	--	--	--
<b>Organochlorine Pesticides</b>						
None Detected	--	--	NS	--	--	--
<b>Herbicides</b>						
None Detected	--	--	NS	--	--	--
<b>Furans</b>						
2,3,7,8-TCDF	Not Listed	ND(0.000000012) [0.000000014 J]	NS	ND(0.0000000060)	0.0000000051 J	
TCDFs (total)	Not Listed	ND(0.000000012) [0.000000014]	NS	ND(0.0000000060)	0.0000000051	
1,2,3,7,8-PeCDF	Not Listed	ND(0.000000013) [0.0000000050 JB]	NS	ND(0.0000000070)	0.000000014 JB	
2,3,4,7,8-PeCDF	Not Listed	ND(0.000000012) [ND(0.000000049) X]	NS	ND(0.0000000016) X	ND(0.000000095) X	
PeCDFs (total)	Not Listed	ND(0.000000013) [0.0000000050]	NS	ND(0.0000000016) X	0.000000014	
1,2,3,4,7,8-HxCDF	Not Listed	ND(0.000000011) [0.0000000034 JB]	NS	0.0000000021 JB	0.000000012 JB	
1,2,3,6,7,8-HxCDF	Not Listed	ND(0.000000011) [0.0000000031 J]	NS	ND(0.0000000060)	0.0000000098 J	
1,2,3,7,8,9-HxCDF	Not Listed	ND(0.000000013) [0.0000000038 JB]	NS	ND(0.0000000070)	ND(0.0000000078) X	
2,3,4,6,7,8-HxCDF	Not Listed	ND(0.000000011) [0.0000000026 J]	NS	ND(0.0000000060)	0.0000000077 J	
HxCDFs (total)	Not Listed	ND(0.000000012) [0.000000013]	NS	0.0000000021	0.0000000029	
1,2,3,4,6,7,8-HpCDF	Not Listed	ND(0.000000014) [0.0000000034 J]	NS	ND(0.0000000070)	ND(0.0000000090) X	
1,2,3,4,7,8,9-HpCDF	Not Listed	ND(0.000000017) [0.0000000021 J]	NS	ND(0.0000000090)	0.000000010 J	
HpCDFs (total)	Not Listed	ND(0.000000015) [0.0000000055]	NS	ND(0.0000000080)	0.000000014	
OCDF	Not Listed	ND(0.000000027) [0.0000000029 J]	NS	ND(0.000000018)	0.000000027 J	
<b>Dioxins</b>						
2,3,7,8-TCDD	0.000001	ND(0.000000015) [ND(0.000000013) X]	NS	ND(0.0000000080)	0.0000000040 J	
TCDDs (total)	Not Listed	ND(0.000000015) [ND(0.000000013) X]	NS	ND(0.0000000080)	0.0000000040	
1,2,3,7,8-PeCDD	Not Listed	ND(0.000000014) [0.0000000032 J]	NS	ND(0.0000000080)	0.000000010 J	
PeCDDs (total)	Not Listed	ND(0.000000014) [0.0000000032]	NS	ND(0.0000000080)	0.000000010	
1,2,3,4,7,8-HxCDD	Not Listed	ND(0.000000015) [0.0000000029 J]	NS	ND(0.0000000090)	ND(0.0000000068) X	
1,2,3,6,7,8-HxCDD	Not Listed	ND(0.000000016) [0.0000000035 J]	NS	ND(0.0000000090)	ND(0.0000000089) X	
1,2,3,7,8,9-HxCDD	Not Listed	ND(0.000000015) [0.0000000036 J]	NS	ND(0.0000000090)	ND(0.0000000037) X	
HxCDDs (total)	Not Listed	ND(0.000000015) [0.0000000010]	NS	ND(0.0000000090)	ND(0.000000019) X	
1,2,3,4,6,7,8-HpCDD	Not Listed	ND(0.000000025) [0.0000000020 J]	NS	ND(0.0000000012)	0.000000012 J	
HpCDDs (total)	Not Listed	ND(0.000000025) [0.0000000020]	NS	ND(0.0000000012)	0.000000012	
OCDD	Not Listed	0.000000053 J [ND(0.000000054) X]	NS	ND(0.0000000044) X	0.000000039 J	
Total Dioxins	Not Listed	0.000000053 J [0.000000015]	NS	ND(0.0000000044)	0.000000065	
Total TEQ (WHO TEFs)	Not Listed	0.000000023 [0.0000000078]	NS	0.0000000017	0.000000022	
<b>Inorganics-Unfiltered</b>						
Cyanide	Not Listed	ND(0.0100) [ND(0.0100)]	NS	ND(0.0100)	0.00320 B	
Vanadium	Not Listed	ND(0.0500) [ND(0.0500)]	NS	ND(0.0500)	ND(0.0500)	
Zinc	Not Listed	0.00640 B [0.0130 B]	NS	0.00800 B	0.0360	
<b>Inorganics-Filtered</b>						
Vanadium	Not Listed	[0.00370 B]	NS	NS	NS	
Zinc	Not Listed	[ND(0.0200)]	NS	NS	NS	

TABLE 6

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTSFORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA  
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 1 GW-2 STANDARDS

(Results are presented in parts per million, ppm)

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of PCBs and Appendix IX + 3 constituents.
2. Data validation has been performed on data set as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved October 17, 2000).
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. NS - Not Sampled - Parameter was not requested on sample chain of custody form.
5. With the exception of dioxin/furans, only those constituents detected in at least one sample are summarized.
6. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998.
7. Duplicate sample results are presented in brackets.
8. -- Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:Organics (volatiles, PCBs, semi-volatiles, pesticides, herbicides, dioxin/furans)

B - Analyte was also detected in the associated method blank.

J - The compound or analyte was positively identified, but the associated numerical value is an estimated concentration.

X - Estimated maximum possible concentration.

Inorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

TABLE 7

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTSFORMER OXBOWS J & K GROUNDWATER MANAGEMENT AREA  
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 1 GW-3 STANDARDS

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	Method 1 GW-3 Standards	GMA2-1 04/15/02	GMA2-2 04/15/02	GMA2-4 04/17/02
<b>Volatile Organics</b>					
Tetrachloroethene	5	ND(0.0020)	0.0018 J [0.0020]	ND(0.0020)	ND(0.0020)
Trichloroethene	20	ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)
Total VOCs	Not Listed	ND(0.20)	0.0018 J [0.0020]	ND(0.20)	ND(0.20)
<b>PCBs-Unfiltered</b>					
Aroclor-1254	Not Applicable	0.00019	0.000038 J [0.000048 J]	ND(0.000065)	ND(0.000065)
Aroclor-1260	Not Applicable	ND(0.000065)	ND(0.000065) [0.000026 J]	ND(0.000065)	ND(0.000065)
Total PCBs	Not Applicable	0.00019	0.000038 J [0.000074 J]	ND(0.000065)	ND(0.000065)
<b>PCBs-Filtered</b>					
Aroclor-1254	Not Listed	0.000072	ND(0.000065) [ND(0.000065)]	ND(0.000065)	ND(0.000065)
Aroclor-1260	Not Listed	ND(0.000065)	ND(0.000065) [ND(0.000065)]	ND(0.000065)	ND(0.000065)
Total PCBs	0.0003	0.000072	ND(0.000065) [ND(0.000065)]	ND(0.000065)	ND(0.000065)
<b>Semivolatile Organics</b>					
None Detected	--	--	--	--	--
<b>Organochlorine Pesticides</b>					
None Detected	--	--	--	--	--
<b>Herbicides</b>					
None Detected	--	--	--	--	--
<b>Furans</b>					
2,3,7,8-TCDF	Not Listed	0.0000000055 J	ND(0.0000000012) [0.0000000014 J]	ND(0.0000000017) X	ND(0.0000000017) X
TCDFs (total)	Not Listed	ND(0.0000000012) X	ND(0.0000000012) [0.0000000014]	ND(0.0000000017) X	ND(0.0000000017) X
1,2,3,7,8-PeCDF	Not Listed	ND(0.0000000037) X	ND(0.0000000013) [0.0000000050 JB]	ND(0.0000000060) X	ND(0.0000000060) X
2,3,4,7,8-PeCDF	Not Listed	0.0000000063 J	ND(0.0000000012) [ND(0.0000000049) X]	ND(0.0000000069) X	ND(0.0000000069) X
PeCDFs (total)	Not Listed	ND(0.0000000020) X	ND(0.0000000013) [0.0000000050]	ND(0.0000000013) X	ND(0.0000000013) X
1,2,3,4,7,8-HxCDF	Not Listed	0.0000000055 JB	ND(0.0000000011) [0.0000000034 JB]	0.0000000075 JB	0.0000000075 JB
1,2,3,6,7,8-HxCDF	Not Listed	0.0000000033 J	ND(0.0000000011) [0.0000000031 J]	0.0000000047 J	0.0000000047 J
1,2,3,7,8,9-HxCDF	Not Listed	0.0000000039 JB	ND(0.0000000013) [0.0000000038 JB]	0.0000000012 J	0.0000000012 J
2,3,4,6,7,8-HxCDF	Not Listed	ND(0.0000000012)	ND(0.0000000011) [0.0000000026 J]	0.0000000073 J	0.0000000073 J
HxCDFs (total)	Not Listed	0.0000000035	ND(0.0000000012) [0.0000000013]	0.0000000032	0.0000000032
1,2,3,4,6,7,8-HpCDF	Not Listed	ND(0.0000000065) X	ND(0.0000000014) [0.0000000034 J]	ND(0.0000000045) X	ND(0.0000000045) X
1,2,3,4,7,8,9-HpCDF	Not Listed	0.0000000028 J	ND(0.0000000017) [0.0000000021 J]	0.0000000092 J	0.0000000092 J
HpCDFs (total)	Not Listed	0.0000000090	ND(0.0000000015) [0.0000000055]	0.0000000092	0.0000000092
OCDF	Not Listed	ND(0.0000000094) X	ND(0.0000000027) [0.0000000029 J]	ND(0.0000000015) X	ND(0.0000000015) X
<b>Dioxins</b>					
2,3,7,8-TCDD	0.00000003	ND(0.0000000015)	ND(0.0000000015) [ND(0.0000000013) X]	ND(0.0000000019) X	ND(0.0000000019) X
TCDDs (total)	Not Listed	ND(0.0000000015)	ND(0.0000000015) [ND(0.0000000013) X]	ND(0.0000000019) X	ND(0.0000000019) X
1,2,3,7,8-PeCDD	Not Listed	ND(0.0000000030) X	ND(0.0000000014) [0.0000000032 J]	0.0000000076 J	0.0000000076 J
PeCDDs (total)	Not Listed	ND(0.0000000030) X	ND(0.0000000014) [0.0000000032]	0.0000000076	0.0000000076
1,2,3,4,7,8-HxCDD	Not Listed	ND(0.0000000018)	ND(0.0000000015) [0.0000000029 J]	0.0000000057 J	0.0000000057 J
1,2,3,6,7,8-HxCDD	Not Listed	ND(0.0000000018)	ND(0.0000000016) [0.0000000035 J]	0.0000000068 J	0.0000000068 J
1,2,3,7,8,9-HxCDD	Not Listed	ND(0.0000000018)	ND(0.0000000015) [0.0000000036 J]	0.000000012 J	0.000000012 J
HxCDDs (total)	Not Listed	ND(0.0000000018)	ND(0.0000000015) [0.0000000010]	0.000000025	0.000000025
1,2,3,4,6,7,8-HpCDD	Not Listed	ND(0.0000000037) X	ND(0.0000000025) [0.0000000020 J]	ND(0.0000000079) X	ND(0.0000000079) X
HpCDDs (total)	Not Listed	ND(0.0000000037) X	ND(0.0000000025) [0.0000000020]	ND(0.0000000079) X	ND(0.0000000079) X
OCDD	Not Listed	0.0000000017 J	0.0000000053 J [ND(0.0000000054) X]	ND(0.0000000020)	ND(0.0000000020)
Total TEQ (WHO TEFs)	0.00000001	0.0000000077	0.0000000023 [0.0000000078]	0.000000016	0.000000016
<b>Inorganics-Unfiltered</b>					
Copper	Not Applicable	ND(0.0250)	ND(0.0250) [ND(0.0250)]	ND(0.0250)	ND(0.0250)
Cyanide	0.01	0.0180	ND(0.0100) [ND(0.0100)]	ND(0.0100)	ND(0.0100)
Vanadium	Not Applicable	ND(0.0500)	ND(0.0500) [ND(0.0500)]	ND(0.0500)	ND(0.0500)
Zinc	Not Applicable	0.0120 B	0.00640 B [0.0130 B]	ND(0.0200)	ND(0.0200)
<b>Inorganics-Filtered</b>					
Copper	Not Listed	0.00450 B	ND(0.100) [ND(0.100)]	ND(0.100)	ND(0.100)
Vanadium	2	ND(0.0500)	0.00380 B [0.00370 B]	ND(0.0500)	ND(0.0500)
Zinc	0.9	0.0120 B	ND(0.0200) [ND(0.0200)]	ND(0.0200)	ND(0.0200)

TABLE 7

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTSFORMER OXBOWS J & K GROUNDWATER MANAGEMENT AREA  
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 1 GW-3 STANDARDS

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	Method 1 GW-3 Standards	GMA2-5 04/17/02	GMA2-6 04/15/02	GMA2-7 04/15/02	GMA2-8 04/16/02
<b>Volatile Organics</b>						
Tetrachloroethene	5	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)
Trichloroethene	20	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Total VOCs	Not Listed	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
<b>PCBs-Unfiltered</b>						
Aroclor-1254	Not Applicable	0.000035 J	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1260	Not Applicable	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs	Not Applicable	0.000035 J	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
<b>PCBs-Filtered</b>						
Aroclor-1254	Not Listed	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1260	Not Listed	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs	0.0003	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
<b>Semivolatile Organics</b>						
None Detected	--	--	--	--	--	--
<b>Organochlorine Pesticides</b>						
None Detected	--	--	--	--	--	--
<b>Herbicides</b>						
None Detected	--	--	--	--	--	--
<b>Furans</b>						
2,3,7,8-TCDF	Not Listed	ND(0.0000000060)	ND(0.0000000016) X	ND(0.0000000011)	ND(0.0000000090)	
TCDFs (total)	Not Listed	ND(0.0000000060)	ND(0.0000000016) X	ND(0.0000000011)	ND(0.0000000015) X	
1,2,3,7,8-PeCDF	Not Listed	ND(0.0000000070)	0.0000000046 JB	ND(0.0000000025) X	ND(0.0000000011) X	
2,3,4,7,8-PeCDF	Not Listed	ND(0.0000000016) X	ND(0.0000000039) X	ND(0.0000000025) X	ND(0.0000000024) X	
PeCDFs (total)	Not Listed	ND(0.0000000016) X	0.0000000046	ND(0.0000000051) X	ND(0.0000000024) X	
1,2,3,4,7,8-HxCDF	Not Listed	0.0000000021 JB	0.0000000047 JB	ND(0.0000000026) X	ND(0.0000000031) X	
1,2,3,6,7,8-HxCDF	Not Listed	ND(0.0000000060)	0.0000000034 J	0.0000000030 J	ND(0.0000000022) X	
1,2,3,7,8,9-HxCDF	Not Listed	ND(0.0000000070)	0.0000000037 JB	0.0000000042 JB	0.0000000050 J	
2,3,4,6,7,8-HxCDF	Not Listed	ND(0.0000000060)	0.0000000032 J	0.0000000029 J	0.0000000030 J	
HxCDFs (total)	Not Listed	0.0000000021	0.0000000015	0.0000000010	0.0000000080	
1,2,3,4,6,7,8-HpCDF	Not Listed	ND(0.0000000070)	0.0000000032 J	0.0000000024 J	ND(0.0000000015) X	
1,2,3,4,7,8,9-HpCDF	Not Listed	ND(0.0000000090)	ND(0.0000000027)	ND(0.0000000025) X	ND(0.0000000017)	
HpCDFs (total)	Not Listed	ND(0.0000000080)	0.0000000032	0.0000000024	ND(0.0000000015) X	
OCDF	Not Listed	ND(0.0000000018)	ND(0.0000000054)	ND(0.0000000042) X	ND(0.0000000035) X	
<b>Dioxins</b>						
2,3,7,8-TCDD	0.00000003	ND(0.0000000080)	ND(0.0000000022)	ND(0.0000000016)	0.0000000025 J	
TCDDs (total)	Not Listed	ND(0.0000000080)	ND(0.0000000022)	ND(0.0000000016)	0.0000000025	
1,2,3,7,8-PeCDD	Not Listed	ND(0.0000000080)	ND(0.0000000040) X	0.0000000030 J	ND(0.0000000052) X	
PeCDDs (total)	Not Listed	ND(0.0000000080)	ND(0.0000000040) X	0.0000000030	ND(0.0000000052) X	
1,2,3,4,7,8-HxCDD	Not Listed	ND(0.0000000090)	0.0000000029 J	0.0000000017 J	ND(0.0000000015) X	
1,2,3,6,7,8-HxCDD	Not Listed	ND(0.0000000090)	ND(0.0000000026)	ND(0.0000000015)	ND(0.0000000015) X	
1,2,3,7,8,9-HxCDD	Not Listed	ND(0.0000000090)	0.0000000033 J	ND(0.0000000025) X	ND(0.0000000016) X	
HxCDDs (total)	Not Listed	ND(0.0000000090)	0.0000000063	0.0000000017	ND(0.0000000016) X	
1,2,3,4,6,7,8-HpCDD	Not Listed	ND(0.0000000012)	ND(0.0000000042)	0.0000000030 J	ND(0.0000000021)	
HpCDDs (total)	Not Listed	ND(0.0000000012)	ND(0.0000000042)	0.0000000030	ND(0.0000000021)	
OCDD	Not Listed	ND(0.0000000044) X	0.0000000079 J	0.0000000076 J	ND(0.0000000015)	
Total TEQ (WHO TEFs)	0.00000001	0.0000000017	0.0000000067	0.0000000061	0.0000000071	
<b>Inorganics-Unfiltered</b>						
Copper	Not Applicable	ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	
Cyanide	0.01	ND(0.0100)	0.00490 B	0.00240 B	0.00530 B	
Vanadium	Not Applicable	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	
Zinc	Not Applicable	0.00800 B	0.0200 B	0.0240	ND(0.0200)	
<b>Inorganics-Filtered</b>						
Copper	Not Listed	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	
Vanadium	2	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	
Zinc	0.9	ND(0.0200)	ND(0.0200)	ND(0.0200)	0.0120 B	

TABLE 7

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTSFORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA  
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 1 GW-3 STANDARDS

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	Method 1 GW-3 Standards	GMAZ-9 04/17/02	J-IR 04/15/02	OJ-MW-2 04/15/02
<b>Volatile Organics</b>					
Tetrachloroethene	5	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)
Trichloroethene	20	ND(0.0050)	0.0032 J	0.0029 J	0.0029 J
Total VOCs	Not Listed	ND(0.20)	0.0032 J	0.0029 J	0.0029 J
<b>PCBs-Unfiltered</b>					
Aroclor-1254	Not Applicable	0.000054 J	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1260	Not Applicable	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs	Not Applicable	0.000054 J	ND(0.000065)	ND(0.000065)	ND(0.000065)
<b>PCBs-Filtered</b>					
Aroclor-1254	Not Listed	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1260	Not Listed	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs	0.0003	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
<b>Semivolatile Organics</b>					
None Detected	--	--	--	--	--
<b>Organochlorine Pesticides</b>					
None Detected	--	--	--	--	--
<b>Herbicides</b>					
None Detected	--	--	--	--	--
<b>Furans</b>					
2,3,7,8-TCDF	Not Listed	ND(0.000000011)	ND(0.000000013)	0.0000000051 J	
TCDFs (total)	Not Listed	ND(0.000000011)	ND(0.000000013)	0.0000000051	
1,2,3,7,8-PeCDF	Not Listed	ND(0.000000010)	ND(0.000000010) X	0.000000014 JB	
2,3,4,7,8-PeCDF	Not Listed	ND(0.000000010)	ND(0.000000021) X	ND(0.000000095) X	
PeCDFs (total)	Not Listed	ND(0.000000010)	ND(0.000000031) X	0.000000014	
1,2,3,4,7,8-HxCDF	Not Listed	ND(0.000000090)	0.0000000035 JB	0.000000012 JB	
1,2,3,6,7,8-HxCDF	Not Listed	ND(0.000000090)	0.0000000034 J	0.0000000098 J	
1,2,3,7,8,9-HxCDF	Not Listed	ND(0.000000011)	0.0000000038 JB	ND(0.0000000078) X	
2,3,4,6,7,8-HxCDF	Not Listed	ND(0.000000010)	0.0000000022 J	0.0000000077 J	
HxCDFs (total)	Not Listed	ND(0.000000010)	0.000000013	0.000000029	
1,2,3,4,6,7,8-HpCDF	Not Listed	ND(0.000000011)	ND(0.000000023) X	ND(0.0000000090) X	
1,2,3,4,7,8,9-HpCDF	Not Listed	ND(0.000000014)	0.0000000030 J	0.000000010 J	
HpCDFs (total)	Not Listed	ND(0.000000012)	0.0000000030	0.000000014	
OCDF	Not Listed	ND(0.000000020)	0.0000000063 J	0.000000027 J	
<b>Dioxins</b>					
2,3,7,8-TCDD	0.00000003	ND(0.000000014)	ND(0.000000017)	0.0000000040 J	
TCDDs (total)	Not Listed	ND(0.000000014)	ND(0.000000017)	0.0000000040	
1,2,3,7,8-PeCDD	Not Listed	ND(0.000000011)	0.0000000029 J	0.000000010 J	
PeCDDs (total)	Not Listed	ND(0.000000016) X	0.0000000029	0.000000010	
1,2,3,4,7,8-HxCDD	Not Listed	ND(0.000000011)	0.0000000037 J	ND(0.0000000068) X	
1,2,3,6,7,8-HxCDD	Not Listed	ND(0.000000011)	0.0000000028 J	ND(0.0000000089) X	
1,2,3,7,8,9-HxCDD	Not Listed	ND(0.000000011)	ND(0.000000026) X	ND(0.000000037) X	
HxCDDs (total)	Not Listed	ND(0.000000011)	0.0000000065	ND(0.000000019) X	
1,2,3,4,6,7,8-HpCDD	Not Listed	ND(0.000000018)	ND(0.000000019) X	0.000000012 J	
HpCDDs (total)	Not Listed	ND(0.000000018)	ND(0.000000019) X	0.000000012	
OCDD	Not Listed	ND(0.000000059) X	ND(0.000000078) X	0.000000039 J	
Total TEQ (WHO TEFs)	0.0000001	0.0000000020	0.0000000065	0.000000022	
<b>Inorganics-Unfiltered</b>					
Copper	Not Applicable	ND(0.0250)	ND(0.0250)	ND(0.0250)	
Cyanide	0.01	0.0170	0.00320 B	0.00320 B	
Vanadium	Not Applicable	ND(0.0500)	ND(0.0500)	ND(0.0500)	
Zinc	Not Applicable	ND(0.0200)	0.0110 B	0.0360	
<b>Inorganics-Filtered</b>					
Copper	Not Listed	ND(0.100)	ND(0.100)	ND(0.100)	
Vanadium	2	ND(0.0500)	ND(0.0500)	ND(0.0500)	
Zinc	0.9	0.00540 B	0.00680 B	0.0110 B	

TABLE 7

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS

FORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA  
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 1 GW-3 STANDARDS

(Results are presented in parts per million, ppm)

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of PCBs and Appendix IX + 3 constituents.
2. Data validation has been performed on data set as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved October 17, 2000).
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. NS - Not Sampled - Parameter was not requested on sample chain of custody form.
5. With the exception of dioxin/furans, only those constituents detected in at least one sample are summarized.
6. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998.
7. Duplicate sample results are presented in brackets.
8. Shading indicates that value exceeds Method 1 GW-3 Standards.
9. -- Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

Organics (volatiles, PCBs, semivolatiles, pesticides, herbicides, dioxin/furans)

B - Analyte was also detected in the associated method blank.

J - Indicates that the associated numerical value is an estimated concentration.

X - Estimated maximum possible concentration.

Inorganics

B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

TABLE 8

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTSFORMER OXBOWS J & K GROUNDWATER MANAGEMENT AREA  
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 3 UCLs

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	UCL	GMA2-1 04/15/02	GMA2-2 04/15/02	GMA2-3 04/15/02	GMA2-4 04/17/02
<b>Volatile Organics</b>						
Tetrachloroethene	50	ND(0.0020)	0.0018 J [0.0020]	ND(0.0020)	ND(0.0020)	ND(0.0020)
Trichloroethene	100	ND(0.0050)	ND(0.0050) [ND(0.0050)]	ND(0.0050)	ND(0.0050)	ND(0.0050)
Total VOCs	Not Listed	ND(0.20)	0.0018 J [0.0020]	ND(0.20)	ND(0.20)	ND(0.20)
<b>PCBs-Unfiltered</b>						
Aroclor-1254	Not Listed	0.00019	0.000038 J [0.000048 J]	NS	ND(0.000065)	
Aroclor-1260	Not Listed	ND(0.000065)	ND(0.000065) [ND(0.000026 J)]	NS	ND(0.000065)	
Total PCBs	0.005	0.00019	0.000038 J [0.000074 J]	NS	ND(0.000065)	
<b>PCBs-Filtered</b>						
Aroclor-1254	Not Listed	0.000072	ND(0.000065) [ND(0.000065)]	NS	ND(0.000065)	
Aroclor-1260	Not Listed	ND(0.000065)	ND(0.000065) [ND(0.000065)]	NS	ND(0.000065)	
Total PCBs	0.005	0.000072	ND(0.000065) [ND(0.000065)]	NS	ND(0.000065)	
<b>Semivolatile Organics</b>						
None Detected	--	--	--	NS	--	
<b>Organochlorine Pesticides</b>						
None Detected	--	--	--	NS	--	
<b>Herbicides</b>						
None Detected	--	--	--	NS	--	
<b>Furans</b>						
2,3,7,8-TCDF	Not Listed	0.000000055 J	ND(0.000000012) [0.000000014 J]	NS	ND(0.000000017) X	
TCDFs (total)	Not Listed	ND(0.000000012) X	ND(0.000000012) [0.000000014]	NS	ND(0.000000017) X	
1,2,3,7,8-PeCDF	Not Listed	ND(0.000000037) X	ND(0.000000013) [0.0000000050 JB]	NS	ND(0.000000060) X	
2,3,4,7,8-PeCDF	Not Listed	0.000000063 J	ND(0.000000012) [ND(0.000000049) X]	NS	ND(0.000000069) X	
PeCDFs (total)	Not Listed	ND(0.000000020) X	ND(0.000000013) [0.000000050]	NS	ND(0.000000013) X	
1,2,3,4,7,8-HxCDF	Not Listed	0.000000055 JB	ND(0.000000011) [0.000000034 JB]	NS	0.000000075 JB	
1,2,3,6,7,8-HxCDF	Not Listed	0.000000033 J	ND(0.000000011) [0.000000031 J]	NS	0.000000047 J	
1,2,3,7,8,9-HxCDF	Not Listed	0.000000039 JB	ND(0.000000013) [0.000000038 JB]	NS	0.000000012 J	
2,3,4,6,7,8-HxCDF	Not Listed	ND(0.000000012)	ND(0.000000011) [0.000000026 J]	NS	0.000000073 J	
HxCDFs (total)	Not Listed	0.000000035	ND(0.000000012) [0.000000013]	NS	0.000000032	
1,2,3,4,6,7,8-HpCDF	Not Listed	ND(0.000000065) X	ND(0.000000014) [0.000000034 J]	NS	ND(0.000000045) X	
1,2,3,4,7,8,9-HpCDF	Not Listed	0.000000028 J	ND(0.000000017) [0.000000021 J]	NS	0.000000092 J	
HpCDFs (total)	Not Listed	0.000000090	ND(0.000000015) [0.000000055]	NS	0.000000092	
OCDF	Not Listed	ND(0.000000094) X	ND(0.000000027) [0.000000029 J]	NS	ND(0.000000015) X	
<b>Dioxins</b>						
2,3,7,8-TCDD	0.000001	ND(0.000000015)	ND(0.000000015) [ND(0.000000013) X]	NS	ND(0.000000019) X	
TCDDs (total)	Not Listed	ND(0.000000015)	ND(0.000000015) [ND(0.000000013) X]	NS	ND(0.000000019) X	
1,2,3,7,8-PeCDD	Not Listed	ND(0.000000030) X	ND(0.000000014) [0.000000032 J]	NS	0.000000076 J	
PeCDDs (total)	Not Listed	ND(0.000000030) X	ND(0.000000014) [0.000000032]	NS	0.000000076	
1,2,3,4,7,8-HxCDD	Not Listed	ND(0.000000018)	ND(0.000000015) [0.000000029 J]	NS	0.000000057 J	
1,2,3,6,7,8-HxCDD	Not Listed	ND(0.000000018)	ND(0.000000016) [0.000000035 J]	NS	0.000000068 J	
1,2,3,7,8,9-HxCDD	Not Listed	ND(0.000000018)	ND(0.000000015) [0.000000036 J]	NS	0.000000012 J	
HxCDDs (total)	Not Listed	ND(0.000000018)	ND(0.000000015) [0.000000010]	NS	0.000000025	
1,2,3,4,6,7,8-HpCDD	Not Listed	ND(0.000000037) X	ND(0.000000025) [0.000000020 J]	NS	ND(0.000000079) X	
HpCDDs (total)	Not Listed	ND(0.000000037) X	ND(0.000000025) [0.000000020]	NS	ND(0.000000079) X	
OCDD	Not Listed	0.000000017 J	0.0000000053 J [ND(0.000000054) X]	NS	ND(0.000000020)	
<b>Total TEQ (WHO TEFs)</b>	0.000001	0.000000077	0.0000000023 [0.0000000078]	NS	0.000000016	
<b>Inorganics-Unfiltered</b>						
Copper	Not Listed	ND(0.0250)	ND(0.0250) [ND(0.0250)]	NS	ND(0.0250)	
Cyanide	2	0.0180	ND(0.0100) [ND(0.0100)]	NS	ND(0.0100)	
Vanadium	20	ND(0.0500)	ND(0.0500) [ND(0.0500)]	NS	ND(0.0500)	
Zinc	20	0.0120 B	0.00640 B [0.0130 B]	NS	ND(0.0200)	
<b>Inorganics-Filtered</b>						
Copper	Not Listed	0.00450 B	ND(0.100) [ND(0.100)]	NS	ND(0.100)	
Vanadium	20	ND(0.0500)	0.00380 B [0.00370 B]	NS	ND(0.0500)	
Zinc	20	0.0120 B	ND(0.0200) [ND(0.0200)]	NS	ND(0.0200)	

TABLE 8

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTSFORMER OXBOWS J & K GROUNDWATER MANAGEMENT AREA  
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 3 UCLs

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	UCL	GMA2-5 04/17/02	GMA2-6 04/15/02	GMA2-7 04/15/02	GMA2-8 04/16/02	GMA2-9 04/17/02
<b>Volatile Organics</b>							
Tetrachloroethene	50	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)	ND(0.0020)
Trichloroethene	100	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)	ND(0.0050)
Total VOCs	Not Listed	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)	ND(0.20)
<b>PCBs-Unfiltered</b>							
Aroclor-1254	Not Listed	0.000035 J	ND(0.000065)	ND(0.000065)	ND(0.000065)	0.000054 J	
Aroclor-1260	Not Listed	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	
Total PCBs	0.005	0.000035 J	ND(0.000065)	ND(0.000065)	ND(0.000065)	0.000054 J	
<b>PCBs-Filtered</b>							
Aroclor-1254	Not Listed	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Aroclor-1260	Not Listed	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
Total PCBs	0.005	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)	ND(0.000065)
<b>Semivolatile Organics</b>							
None Detected	—	—	—	—	—	—	—
<b>Organochlorine Pesticides</b>							
None Detected	—	—	—	—	—	—	—
<b>Herbicides</b>							
None Detected	—	—	—	—	—	—	—
<b>Furans</b>							
2,3,7,8-TCDF	Not Listed	ND(0.0000000060)	ND(0.000000016) X	ND(0.000000011)	ND(0.0000000090)	ND(0.0000000011)	
TCDFs (total)	Not Listed	ND(0.0000000060)	ND(0.000000016) X	ND(0.000000011)	ND(0.000000015) X	ND(0.0000000011)	
1,2,3,7,8-PeCDF	Not Listed	ND(0.0000000070)	0.000000046 JB	ND(0.000000025) X	ND(0.000000011)	ND(0.000000010)	
PeCDFs (total)	Not Listed	ND(0.000000016) X	0.000000046	ND(0.000000051) X	ND(0.000000024) X	ND(0.000000010)	
1,2,3,4,7,8-HxCDF	Not Listed	0.000000021 JB	0.000000047 JB	ND(0.000000026) X	ND(0.000000031) X	ND(0.0000000090)	
1,2,3,6,7,8-HxCDF	Not Listed	ND(0.000000060)	0.000000034 J	0.0000000030 J	ND(0.000000022) X	ND(0.0000000090)	
1,2,3,7,8,9-HxCDF	Not Listed	ND(0.000000070)	0.000000037 JB	0.000000042 JB	0.000000050 J	ND(0.000000011)	
2,3,4,6,7,8-HxCDF	Not Listed	ND(0.000000060)	0.000000032 J	0.000000029 J	0.000000030 J	ND(0.000000010)	
HxCDFs (total)	Not Listed	0.000000021	0.000000015	0.000000010	0.0000000080	ND(0.000000010)	
1,2,3,4,6,7,8-HpCDF	Not Listed	ND(0.000000070)	0.000000032 J	0.000000024 J	ND(0.000000015) X	ND(0.000000011)	
1,2,3,4,7,8,9-HpCDF	Not Listed	ND(0.000000090)	ND(0.000000027)	ND(0.000000025) X	ND(0.000000017)	ND(0.000000014)	
HpCDFs (total)	Not Listed	ND(0.000000080)	0.000000032	0.000000024	ND(0.000000015) X	ND(0.000000012)	
OCDF	Not Listed	ND(0.000000018)	ND(0.000000054)	ND(0.000000042) X	ND(0.000000035)	ND(0.000000020)	
<b>Dioxins</b>							
2,3,7,8-TCDD	0.000001	ND(0.0000000080)	ND(0.000000022)	ND(0.000000016)	0.000000025 J	ND(0.000000014)	
TCDDs (total)	Not Listed	ND(0.0000000080)	ND(0.000000022)	ND(0.000000016)	0.000000025	ND(0.000000014)	
1,2,3,7,8-PeCDD	Not Listed	ND(0.0000000080)	ND(0.000000040) X	0.000000030 J	ND(0.000000052) X	ND(0.000000011)	
PeCDDs (total)	Not Listed	ND(0.0000000080)	ND(0.000000040) X	0.000000030	ND(0.000000052) X	ND(0.000000016) X	
1,2,3,4,7,8-HxCDD	Not Listed	ND(0.0000000090)	0.000000029 J	0.000000017 J	ND(0.0000000015)	ND(0.0000000011)	
1,2,3,6,7,8-HxCDD	Not Listed	ND(0.0000000090)	ND(0.000000026)	ND(0.000000015)	ND(0.000000015)	ND(0.0000000011)	
1,2,3,7,8,9-HxCDD	Not Listed	ND(0.0000000090)	0.000000033 J	ND(0.000000025) X	ND(0.000000016) X	ND(0.0000000011)	
HxCDDs (total)	Not Listed	ND(0.0000000090)	0.000000063	0.000000017	ND(0.000000016) X	ND(0.000000011)	
1,2,3,4,6,7,8-HpCDD	Not Listed	ND(0.000000012)	ND(0.000000042)	0.000000030 J	ND(0.000000021)	ND(0.000000018)	
HpCDDs (total)	Not Listed	ND(0.000000012)	ND(0.000000042)	0.000000030	ND(0.000000021)	ND(0.000000018)	
OCDD	Not Listed	ND(0.000000044) X	0.000000079 J	0.000000076 J	ND(0.000000015)	ND(0.000000059) X	
Total TEQ (WHO TEFs)	0.000001	0.000000017	0.000000067	0.000000061	0.000000071	0.000000020	
<b>Inorganics-Unfiltered</b>							
Copper	Not Listed	ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	ND(0.0250)	
Cyanide	2	ND(0.100)	0.00490 B	0.00240 B	0.00530 B	0.0170	
Vanadium	20	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	
Zinc	20	0.00800 B	0.0200 B	0.0240	ND(0.0200)	ND(0.0200)	
<b>Inorganics-Filtered</b>							
Copper	Not Listed	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	
Vanadium	20	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	ND(0.0500)	
Zinc	20	ND(0.0200)	ND(0.0200)	ND(0.0200)	0.0120 B	0.00540 B	

TABLE 8

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTSFORMER OXBOWS J & K GROUNDWATER MANAGEMENT AREA  
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 3 UCLs

(Results are presented in parts per million, ppm)

Parameter	Sample ID: Date Collected:	UCL	J-1R 04/15/02	OJ-MW-2 04/15/02
<b>Volatile Organics</b>				
Tetrachloroethene	50	ND(0.0020)	ND(0.0020)	
Trichloroethene	100	0.0032 J	0.0029 J	
Total VOCs	Not Listed	0.0032 J	0.0029 J	
<b>PCBs-Unfiltered</b>				
Aroclor-1254	Not Listed	ND(0.000065)	ND(0.000065)	
Aroclor-1260	Not Listed	ND(0.000065)	0.000031 J	
Total PCBs	0.005	ND(0.000065)	0.000031 J	
<b>PCBs-Filtered</b>				
Aroclor-1254	Not Listed	ND(0.000065)	ND(0.000065)	
Aroclor-1260	Not Listed	ND(0.000065)	ND(0.000065)	
Total PCBs	0.005	ND(0.000065)	ND(0.000065)	
<b>Semivolatile Organics</b>				
None Detected	--	--	--	
<b>Organochlorine Pesticides</b>				
None Detected	--	--	--	
<b>Herbicides</b>				
None Detected	--	--	--	
<b>Furans</b>				
2,3,7,8-TCDF	Not Listed	ND(0.0000000013)	0.0000000051 J	
TCDFs (total)	Not Listed	ND(0.0000000013)	0.0000000051	
1,2,3,7,8-PeCDF	Not Listed	ND(0.0000000010) X	0.000000014 JB	
2,3,4,7,8-PeCDF	Not Listed	ND(0.0000000021) X	ND(0.0000000095) X	
PeCDFs (total)	Not Listed	ND(0.0000000031) X	0.000000014	
1,2,3,4,7,8-HxCDF	Not Listed	0.0000000035 JB	0.000000012 JB	
1,2,3,6,7,8-HxCDF	Not Listed	0.0000000034 J	0.0000000098 J	
1,2,3,7,8,9-HxCDF	Not Listed	0.0000000038 JB	ND(0.0000000078) X	
2,3,4,6,7,8-HxCDF	Not Listed	0.0000000022 J	0.0000000077 J	
HxCDFs (total)	Not Listed	0.0000000013	0.0000000029	
1,2,3,4,6,7,8-HpCDF	Not Listed	ND(0.0000000023) X	ND(0.0000000090) X	
1,2,3,4,7,8,9-HpCDF	Not Listed	0.0000000030 J	0.000000010 J	
HpCDFs (total)	Not Listed	0.0000000030	0.000000014	
OCDF	Not Listed	0.0000000063 J	0.000000027 J	
<b>Dioxins</b>				
2,3,7,8-TCDD	0.0000001	ND(0.0000000017)	0.0000000040 J	
TCDDs (total)	Not Listed	ND(0.0000000017)	0.0000000040	
1,2,3,7,8-PeCDD	Not Listed	0.0000000029 J	0.0000000010 J	
PeCDDs (total)	Not Listed	0.0000000029	0.0000000010	
1,2,3,4,7,8-HxCDD	Not Listed	0.0000000037 J	ND(0.0000000068) X	
1,2,3,6,7,8-HxCDD	Not Listed	0.0000000028 J	ND(0.0000000089) X	
1,2,3,7,8,9-HxCDD	Not Listed	ND(0.0000000026) X	ND(0.0000000037) X	
HxCDDs (total)	Not Listed	0.0000000065	ND(0.0000000019) X	
1,2,3,4,6,7,8-HpCDD	Not Listed	ND(0.0000000019) X	0.000000012 J	
HpCDDs (total)	Not Listed	ND(0.0000000019) X	0.000000012	
OCDD	Not Listed	ND(0.0000000078) X	0.000000039 J	
<b>Total TEQ (WHO TEFs)</b>	0.000001	0.0000000065	0.000000022	
<b>Inorganics-Unfiltered</b>				
Copper	Not Listed	ND(0.0250)	ND(0.0250)	
Cyanide	2	0.00320 B	0.00320 B	
Vanadium	20	ND(0.0500)	ND(0.0500)	
Zinc	20	0.0110 B	0.0360	
<b>Inorganics-Filtered</b>				
Copper	Not Listed	ND(0.100)	ND(0.100)	
Vanadium	20	ND(0.0500)	ND(0.0500)	
Zinc	20	0.00680 B	0.0110 B	

TABLE 8

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS

FORMER OXBOWS J&K GROUNDWATER MANAGEMENT AREA  
COMPARISON OF GROUNDWATER ANALYTICAL RESULTS TO MCP METHOD 3 UCLs

(Results are presented in parts per million, ppm)

Notes:

1. Samples were collected by Blasland Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of PCBs and other Appendix IX + 3 constituents.
2. Data validation has been performed on data set as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved October 17, 2000).
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. NS - Not Sampled - Parameter was not requested on sample chain of custody form.
5. With the exception of dioxin/furans, only those constituents detected in at least one sample are summarized.
6. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 106(2), December 1998.
7. Duplicate sample results are presented in brackets.
8. -- Indicates that all constituents for the parameter group were not detected.

Data Qualifiers:

Organics (volatiles, PCBs, semi-volatiles, pesticides, herbicides, dioxin/furans)

B - Analyte was also detected in the associated method blank.

J - Indicates that the associated numerical value is an estimated concentration.

X - Estimated maximum possible concentration.

Inorganics

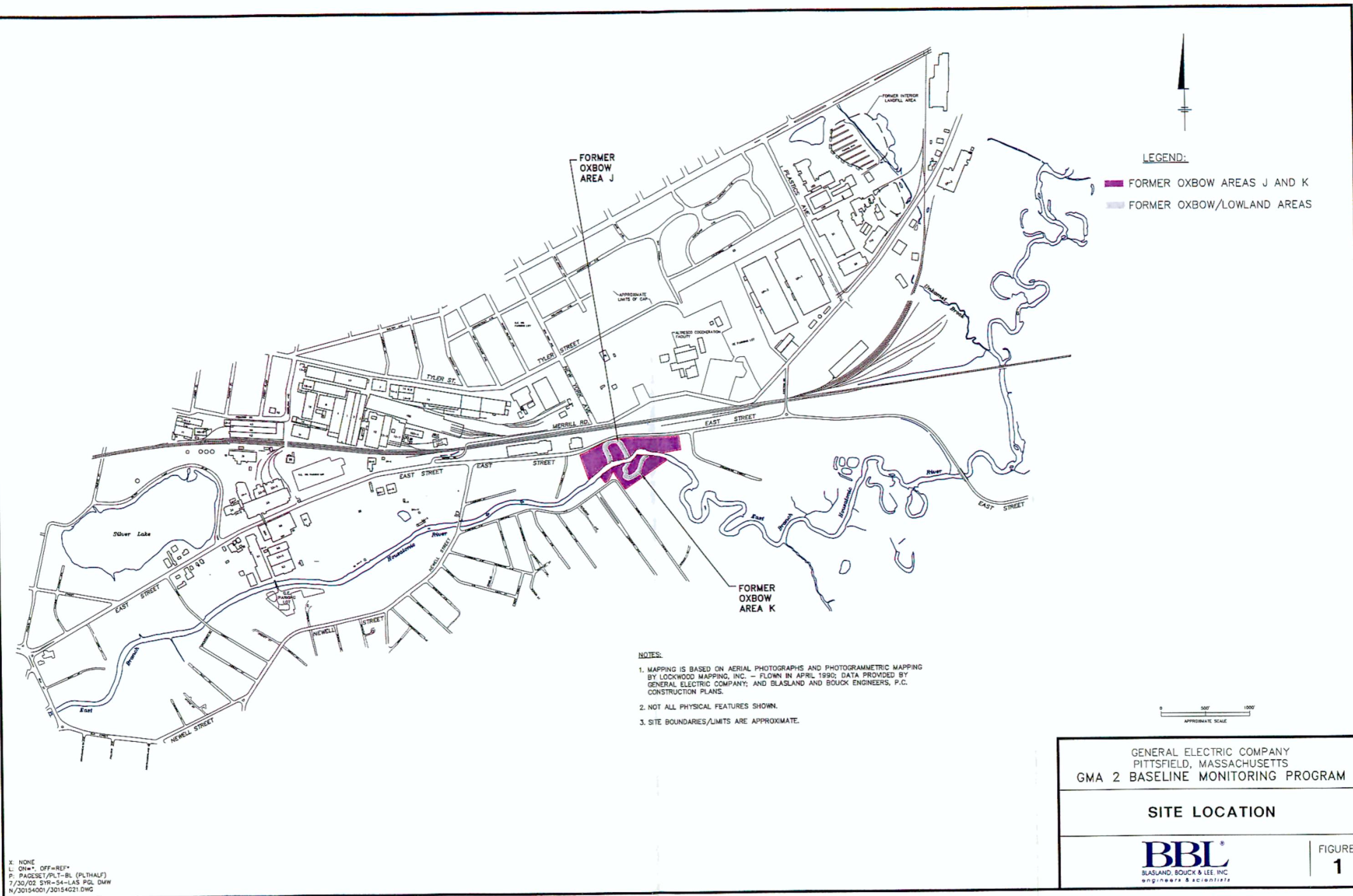
B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

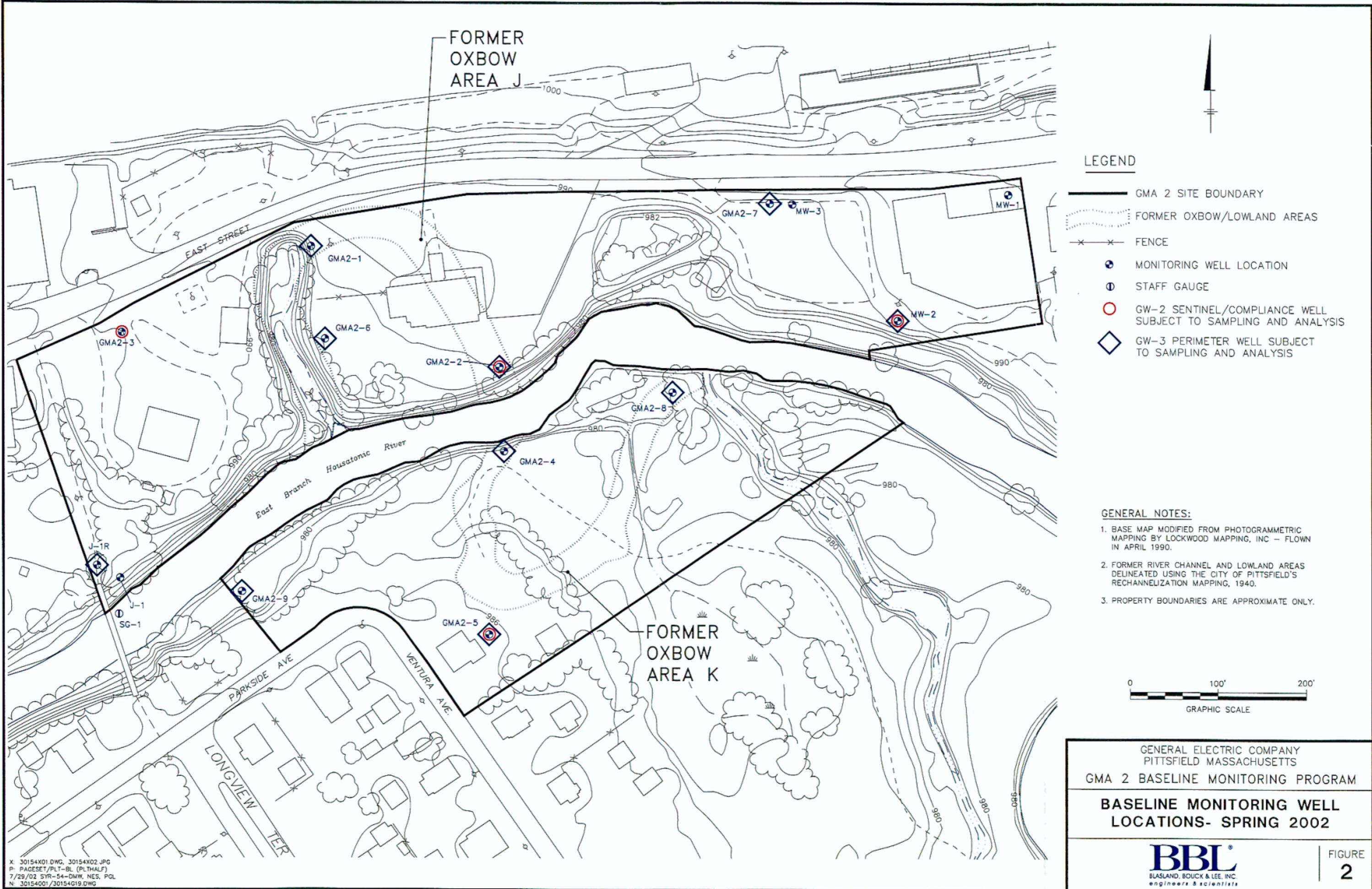
J - Indicates that the associated numerical value is an estimated concentration.

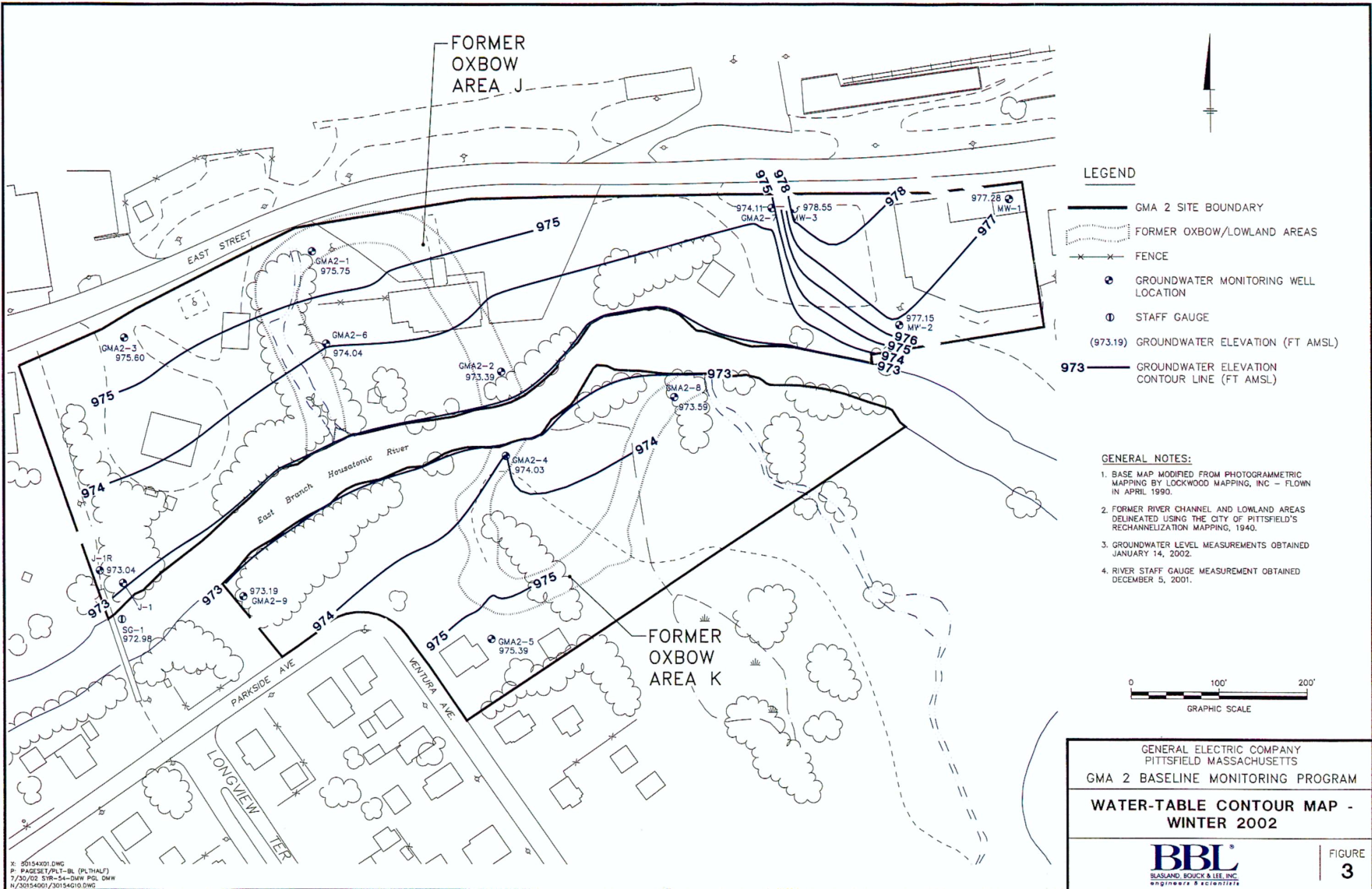
## *Figures*

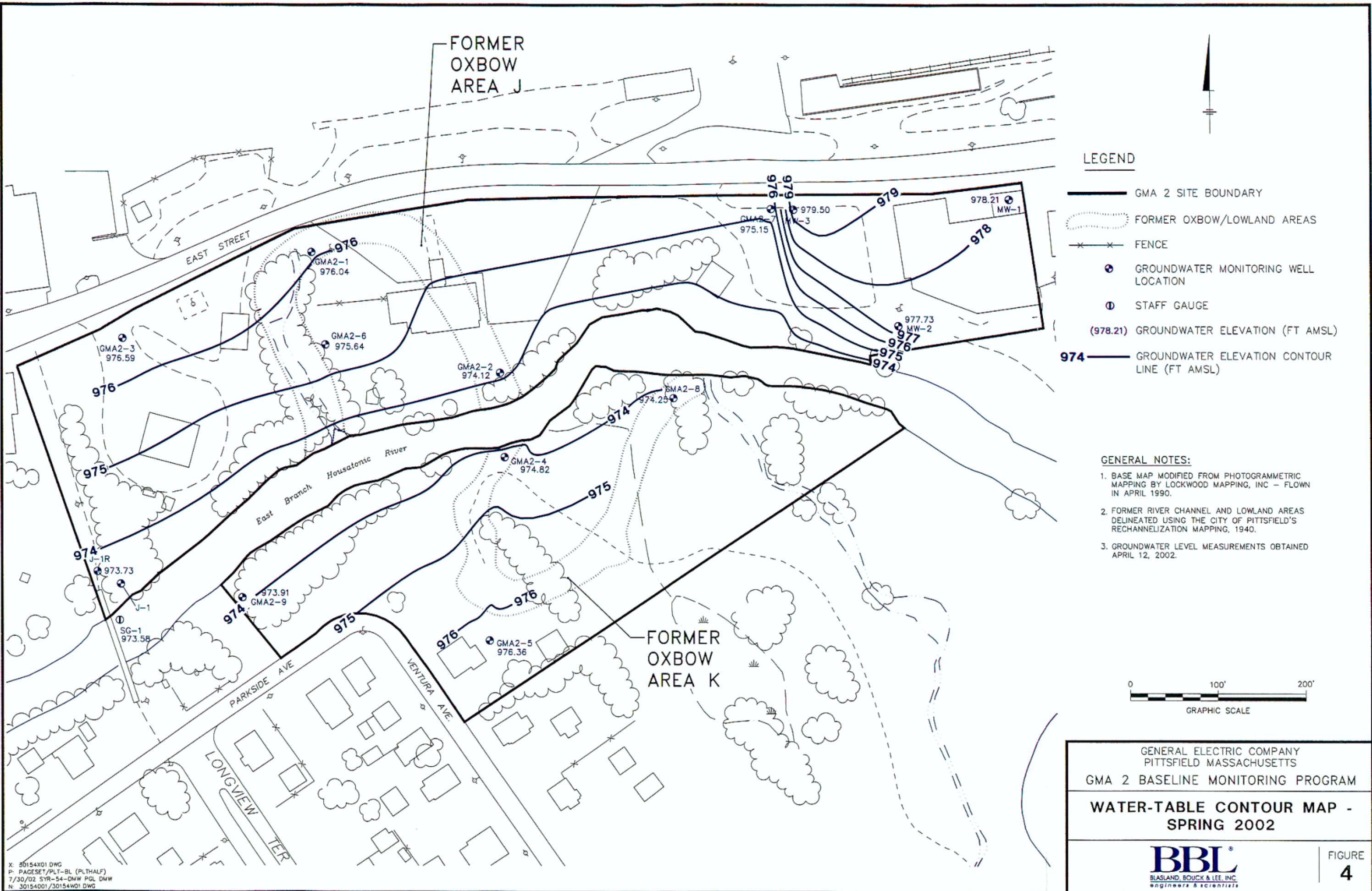
---

**BBL®**  
BLASLAND, BOUCK & LEE, INC.  
*engineers & scientists*









## **Appendices**

---

**BBL**<sup>®</sup>  
BLASLAND, BOUCK & LEE, INC.  
*engineers & scientists*

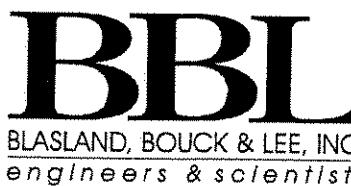
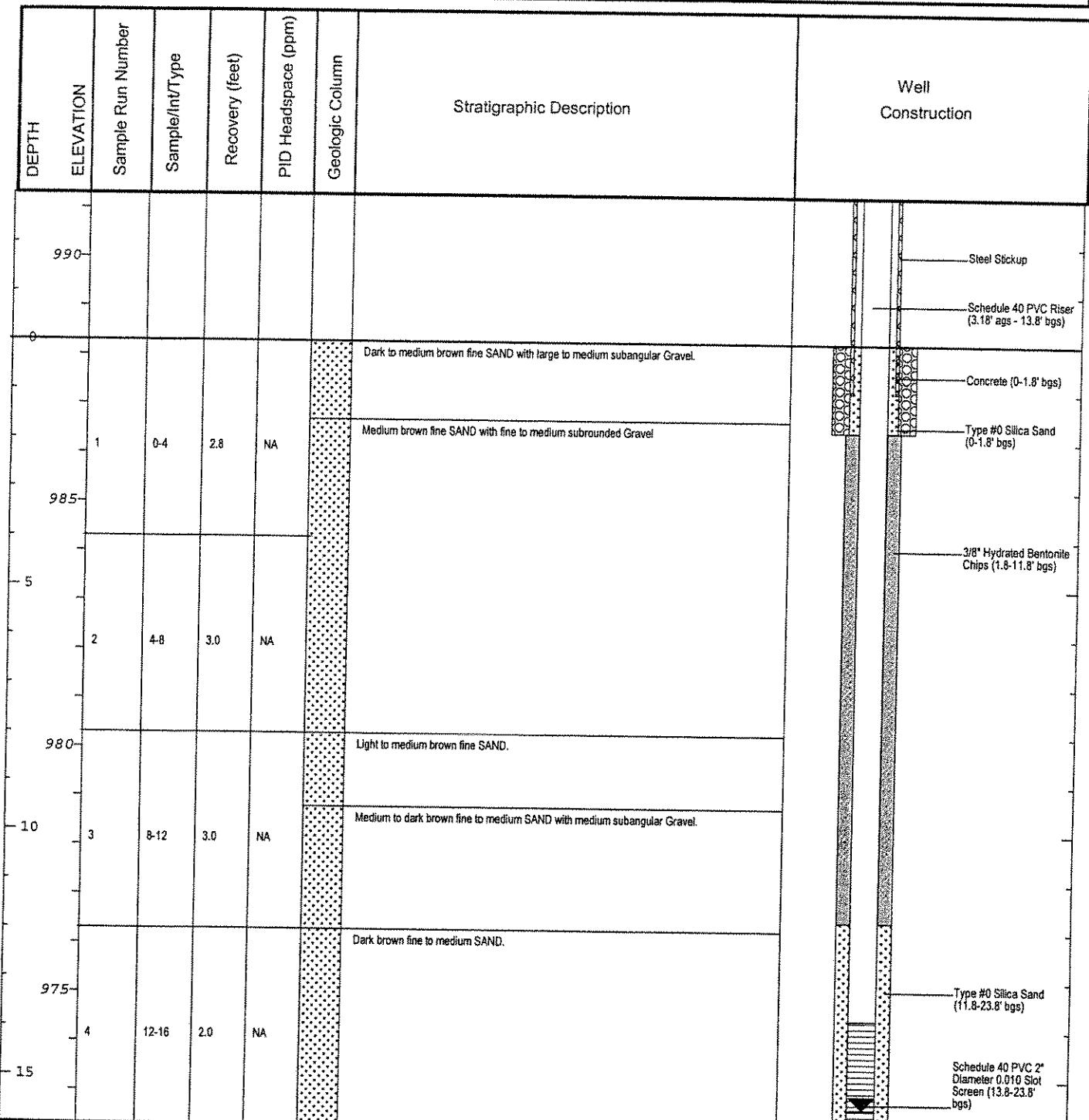
## ***Appendix A***

---

### **Monitoring Well Logs**



Date Start/Finish: 11/7/01 Drilling Company: BBLES Driller's Name: Joe Bishop Drilling Method: Direct Push/HSA Sampler Size: 4' x 2" ID Disposable Liner Auger Size: 4 1/4" ID Rig Type: Truck Mounted Power Probe 9600	Northing: 534402.6000 Easting: 135510.2000 Casing Elevation: 991.36  Borehole Depth: 20' bgs Surface Elevation: 988.30  Descriptions By: Jeff Bishop	Well ID: GMA2-1  Client: General Electric Company  Location: Oxbow Areas J and K Groundwater Management Area 2 1350 East St. - Pittsfield, MA
---	---	---



**Remarks:** NA = Not Available/Not Applicable.

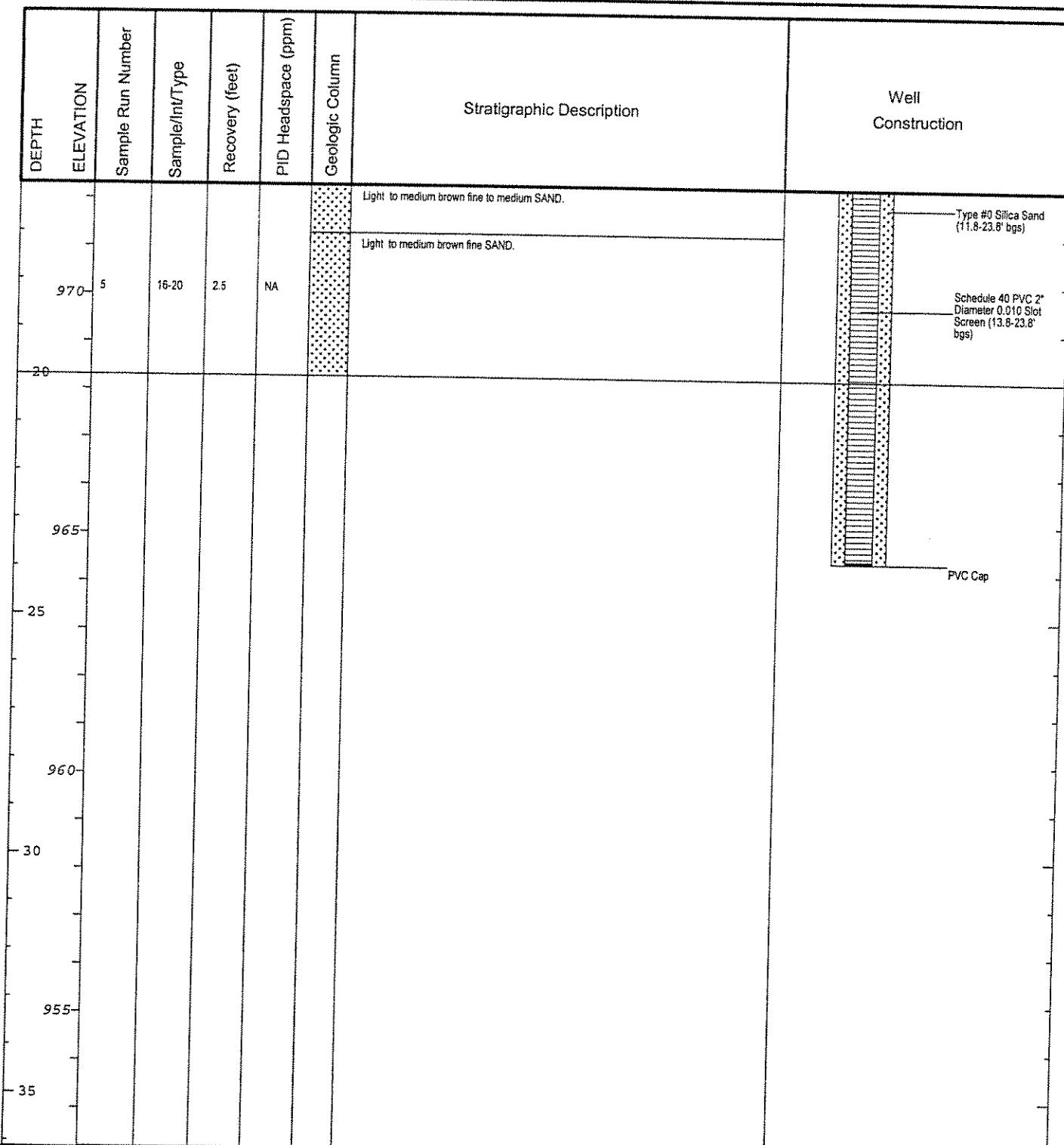
#### Water Level Data

Date	Depth	Elev.
7/16/02	15.61	975.75

**Client:**  
General Electric Company  
**Site Location:**  
Oxbow Areas J and K  
Groundwater Management Area 2  
1350 East St. - Pittsfield, MA

Well ID: GMA2-1

Borehole Depth: 20' bgs

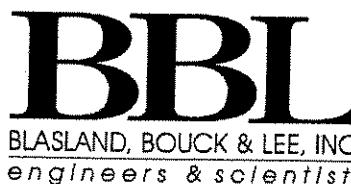
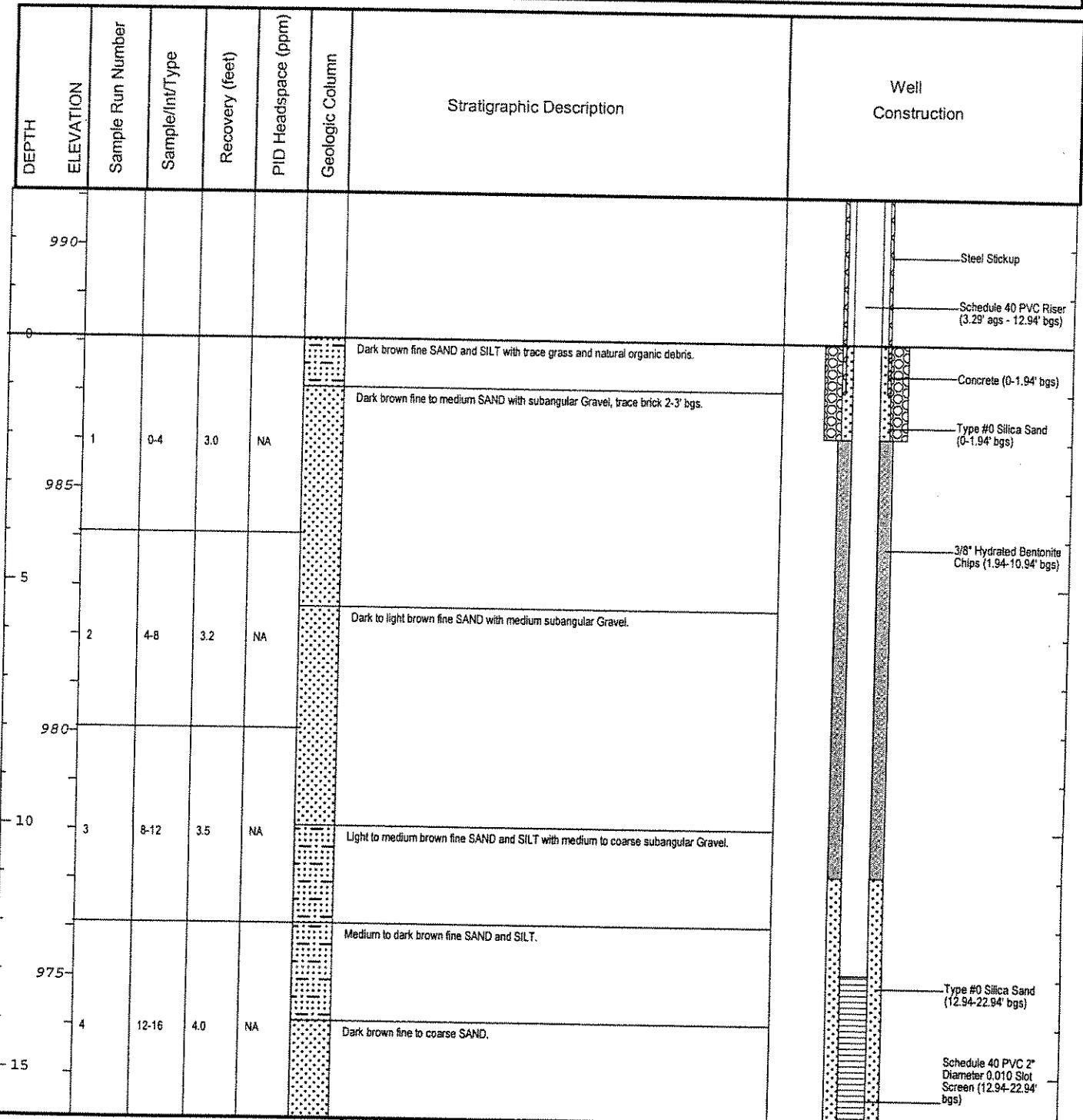


**Remarks:** NA = Not Available/Not Applicable.

**Water Level Data**

Date	Depth	Elev.
7/16/02	15.61	975.75

Date Start/Finish: 11/6/01 Drilling Company: BBLES Driller's Name: Joe Bishop Drilling Method: Direct Push/HSA Sampler Size: 4' x 2" ID Disposable Liner Auger Size: 4 1/4" ID Rig Type: Truck Mounted Power Probe 9600	Nothing: 534264.3000 Easting: 135725.0000 Casing Elevation: 991.19  Borehole Depth: 20' bgs Surface Elevation: 988.10  Descriptions By: Jeff Bishop	Well ID: GMA2-2  Client: General Electric Company  Location: Oxbow Areas J and K Groundwater Management Area 2 1350 East St. - Pittsfield, MA
---	--	---



Remarks: NA = Not Available/Not Applicable.

#### Water Level Data

Date	Depth	Elev.
------	-------	-------

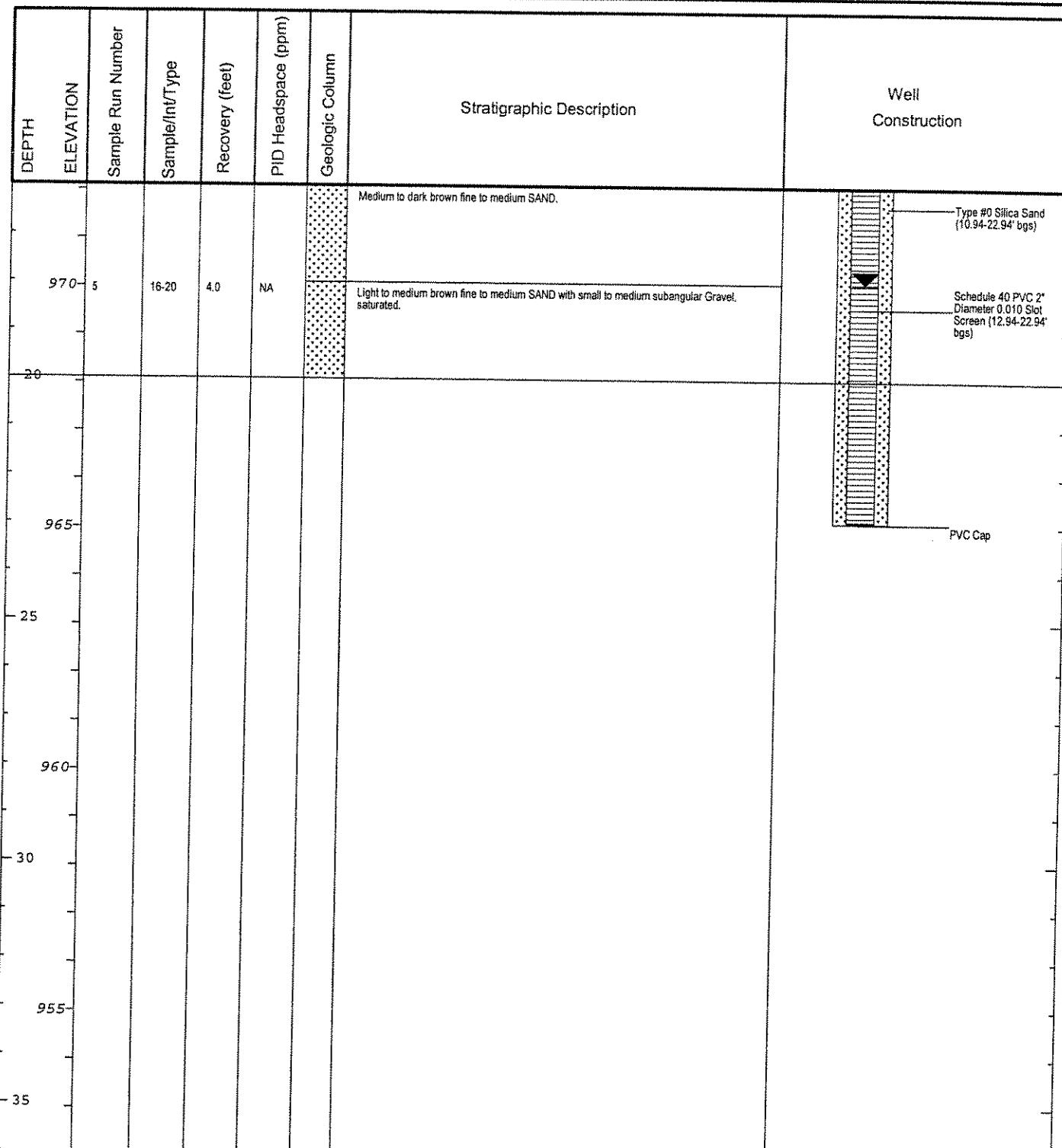
7/16/02 17.99 973.20

**Client:**  
General Electric Company

Well ID: GMA2-2

**Site Location:**  
Oxbow Areas J and K  
Groundwater Management Area 2  
1350 East St. - Pittsfield, MA

Borehole Depth: 20' bgs

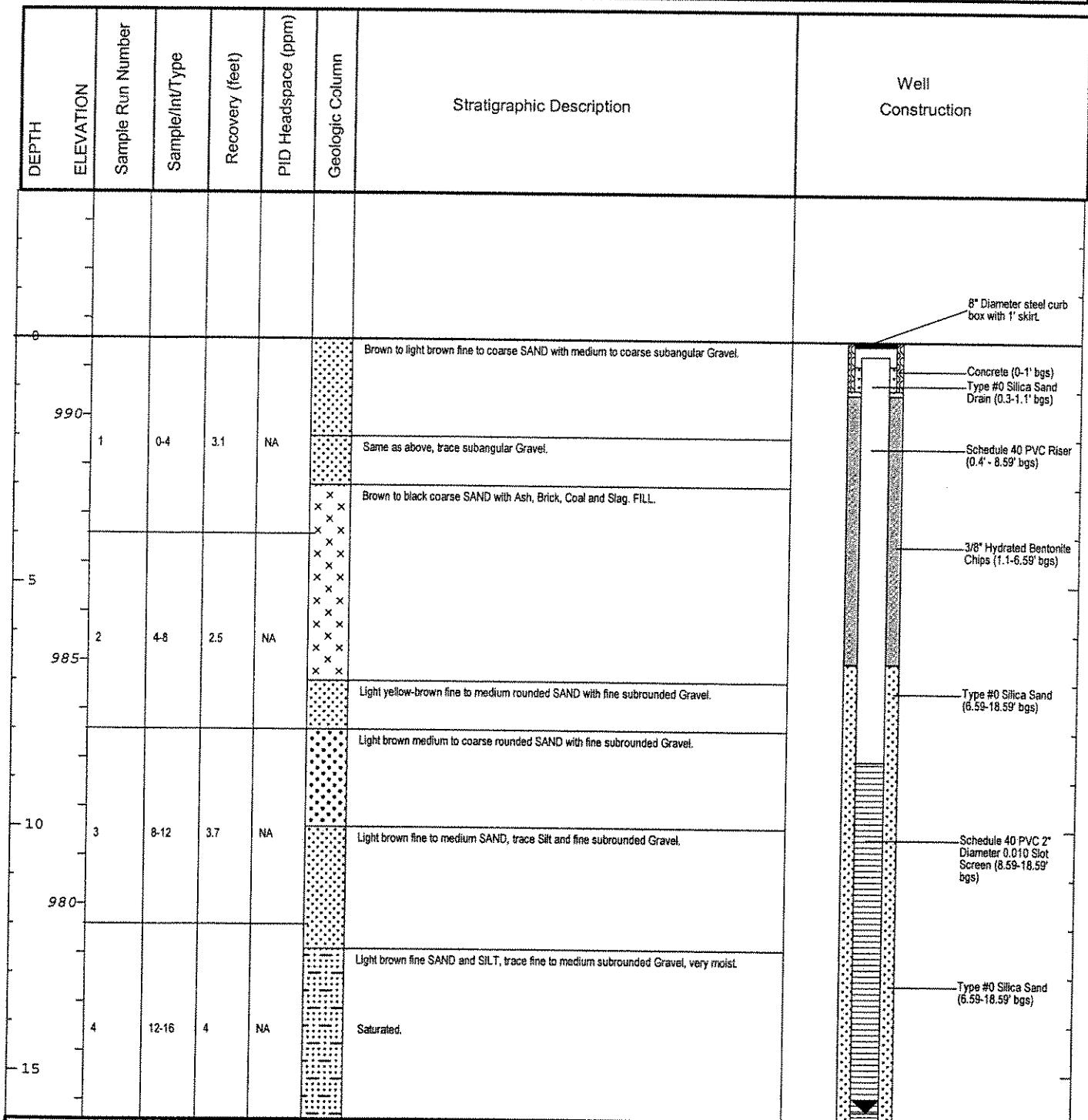


**Remarks:** NA = Not Available/Not Applicable.

**Water Level Data**

Date	Depth	Elev.
7/16/02	17.99	973.20

Date Start/Finish: 10/10/01 Drilling Company: BBLES Driller's Name: Joe Bishop Drilling Method: Direct Push/HSA Sampler Size: 4' x 2" ID Disposable Liner Auger Size: 4 1/4" ID Rig Type: Truck Mounted Power Probe 9600	Northing: 534264.3000 Easting: 135725.0000 Casing Elevation: 991.48  Borehole Depth: 16' bgs Surface Elevation: 991.59  Descriptions By: Brett Kameinski	Well ID: GMA2-3  Client: General Electric Company  Location: Oxbow Areas J and K Groundwater Management Area 2 1330 East St. - Pittsfield, MA
--	---	---



**BBL**  
BLASLAND, BOUCK & LEE, INC.  
engineers & scientists

Remarks: NA = Not Available/Not Applicable,

#### Water Level Data

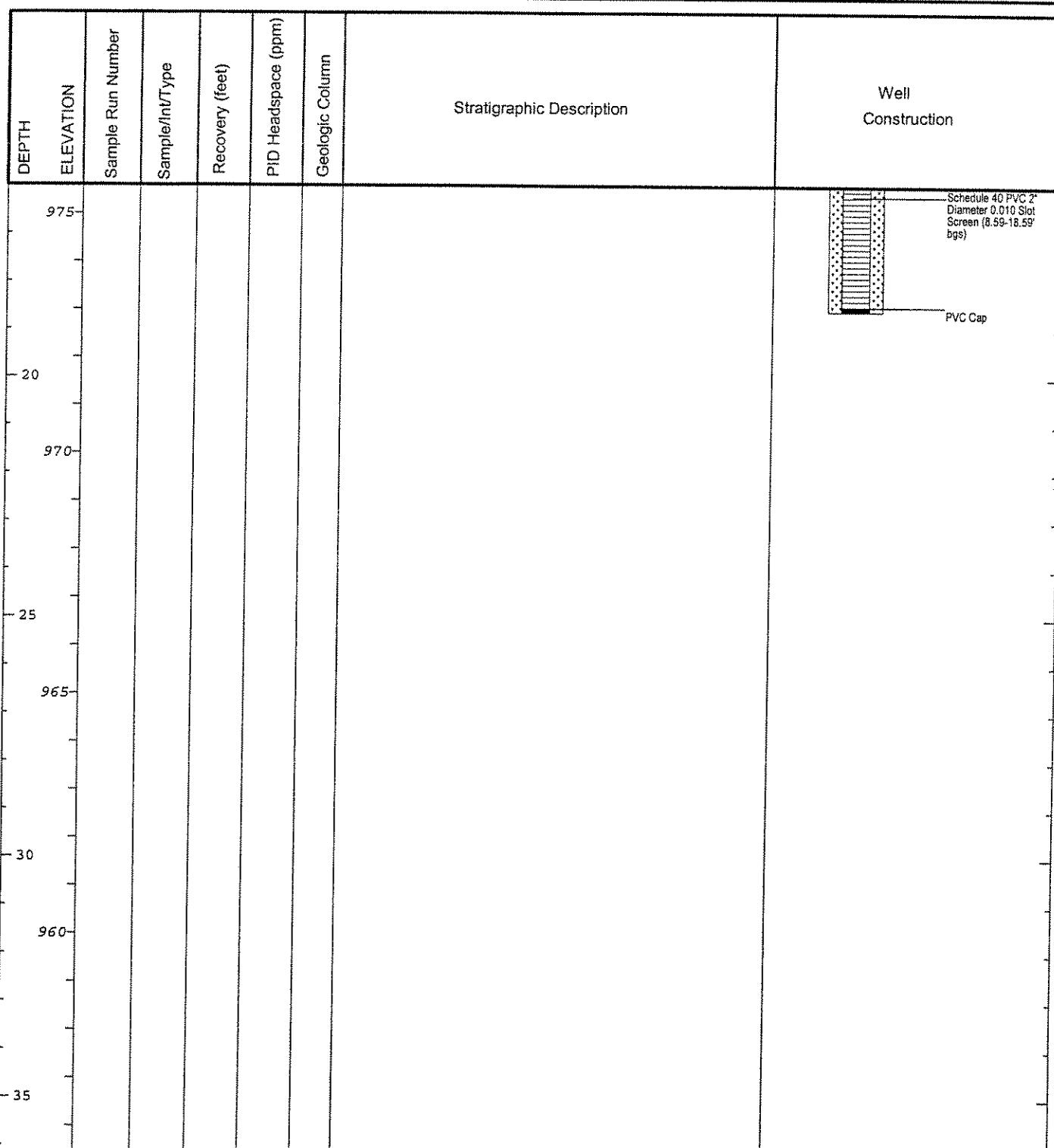
Date	Depth	Elev.
17/16/01	15.41	976.07

**Client:**  
General Electric Company

**Site Location:**  
Oxbow Areas J and K  
Groundwater Management Area 2  
1330 East St. - Pittsfield, MA

**Well ID:** GMA2-3

**Borehole Depth:** 16' bgs



**Remarks:** NA = Not Available/Not Applicable.

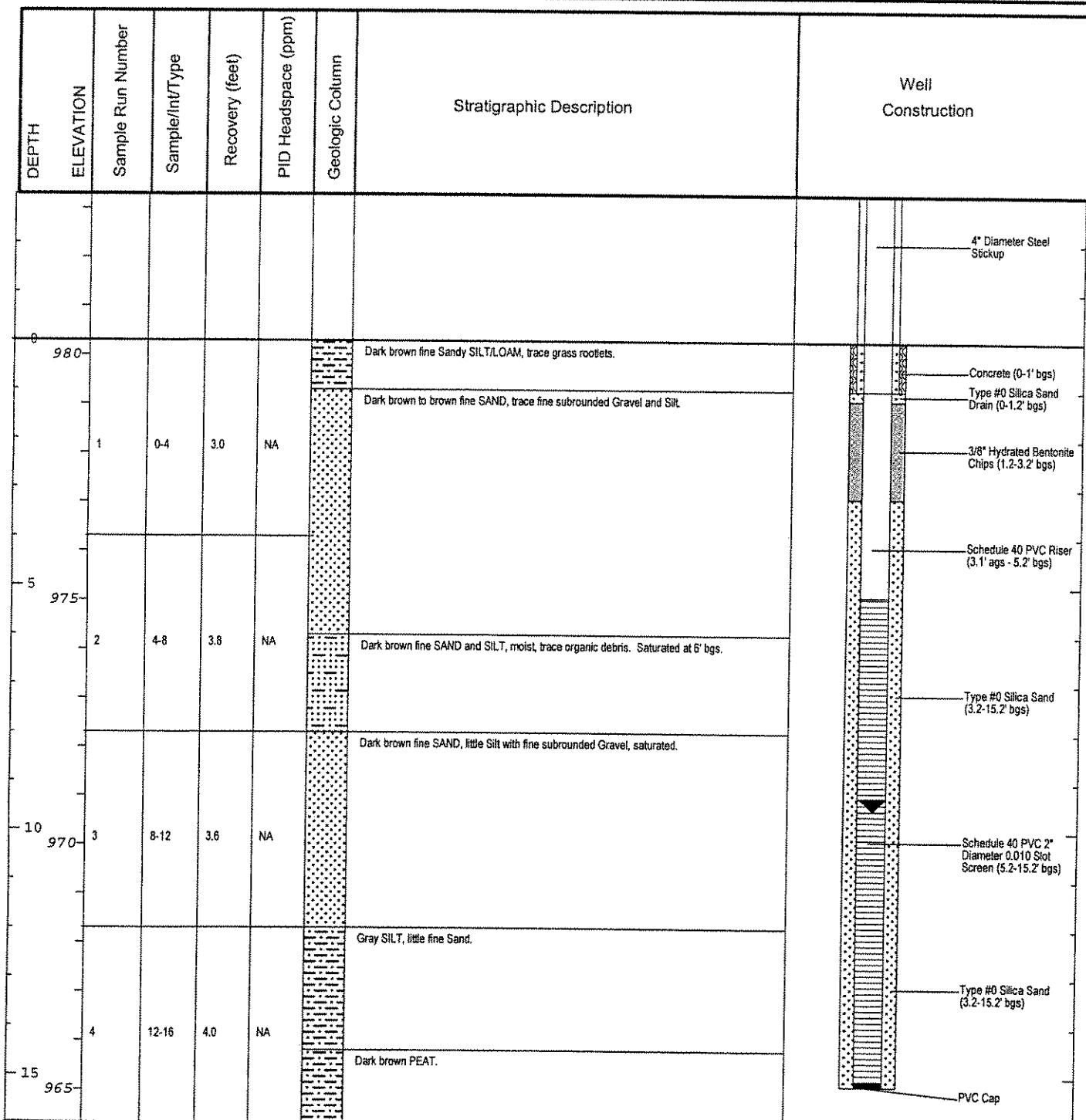
**Water Level Data**

Date	Depth	Elev.
17/16/01	15.41	976.07

**Date Start/Finish:** 10/18/01  
**Drilling Company:** BBLES  
**Driller's Name:** Joe Bishop  
**Drilling Method:** Direct Push/HSA  
**Sampler Size:** 4' x 2" ID Disposable Liner  
**Auger Size:** 4 1/4" ID  
**Rig Type:** Truck Mounted Power Probe 9600

**Northing:** 534167.6000  
**Easting:** 135730.0000  
**Casing Elevation:** 983.41  
  
**Borehole Depth:** 16' bgs  
**Surface Elevation:** 980.30  
  
**Descriptions By:** Brett Kameinski

**Well ID:** GMA2-4  
**Client:** General Electric Company  
  
**Location:** Oxbow Areas J and K  
**Groundwater Management Area 2**  
**Lot K10-10-4 Pittsfield, MA**



**Remarks:** NA = Not Available/Not Applicable.

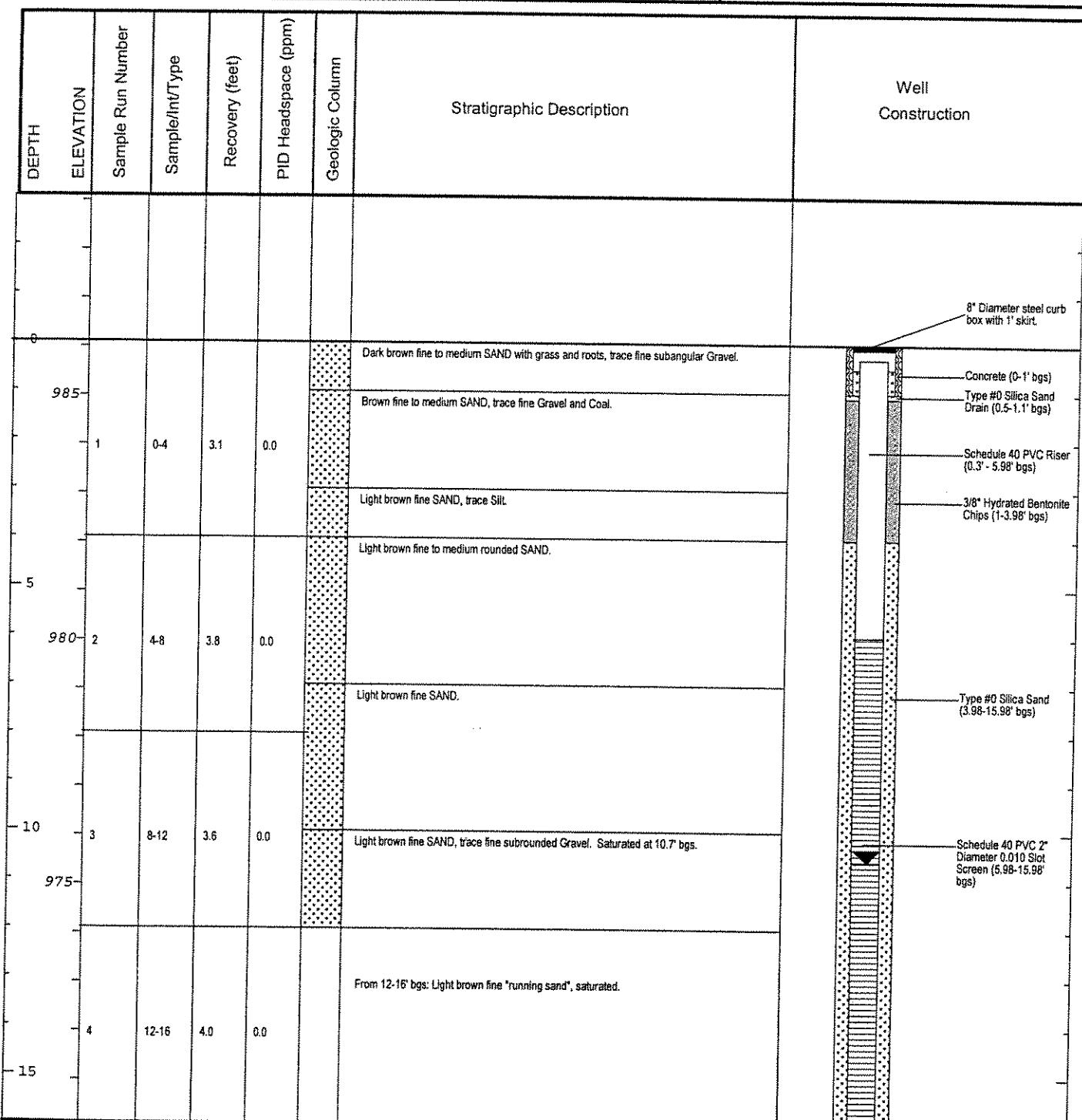
#### Water Level Data

Date	Depth	Elev.
7/17/02	9.57	973.84

Date Start/Finish: 10/9/01  
Drilling Company: BBLES  
Driller's Name: Joe Bishop  
Drilling Method: Direct Push/HSA  
Sampler Size: 4' x 2" ID Disposable Liner  
Auger Size: 4 1/4" ID  
Rig Type: Truck Mounted Power Probe 9600

Northing: 533956.6000  
Easting: 135712.8000  
Casing Elevation: 985.85  
Borehole Depth: 16' bgs  
Surface Elevation: 986.11  
Descriptions By: Brett Kameinski

Well ID: GMA2-5  
Client: General Electric Company  
Location: Oxbow Areas J and K  
Groundwater Management Area 2  
7 Ventura Ave. - Pittsfield, MA



**BBL**  
BLASLAND, BOUCK & LEE, INC.  
engineers & scientists

### Remarks:

### Water Level Data

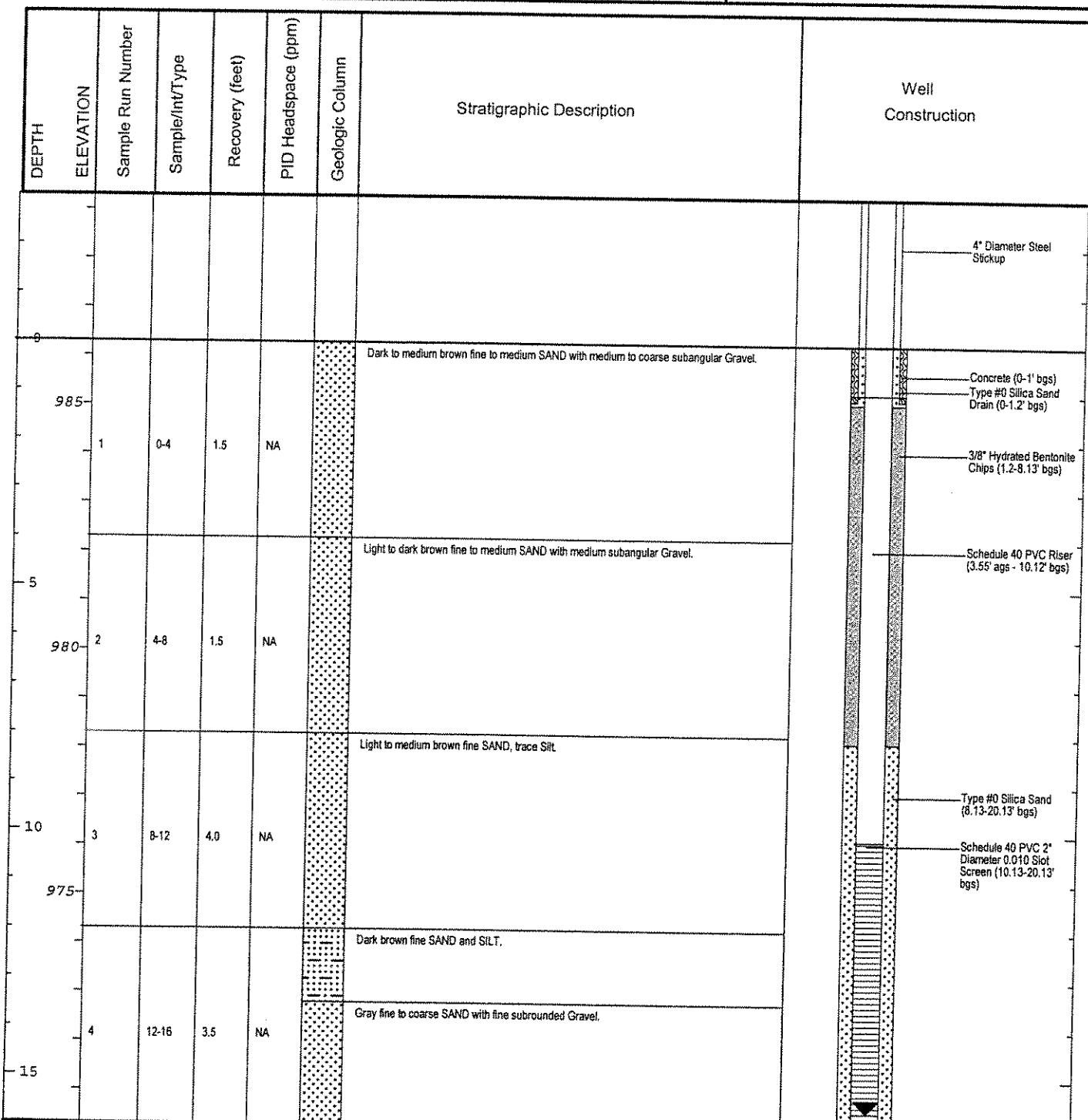
Date	Depth	Elev.
------	-------	-------

7/17/02	10.6	975.25
---------	------	--------

Date Start/Finish: 11/08/02  
Drilling Company: BBLES  
Driller's Name: Joe Bishop  
Drilling Method: Direct Push/HSA  
Sampler Size: 4' x 2" ID Disposable Liner  
Auger Size: 4 1/4" ID  
Rig Type: Truck Mounted Power Probe 9600.

Northing: 534296.4000  
Easting: 135526.0000  
Casing Elevation: 989.73  
Borehole Depth: 20' bgs  
Surface Elevation: 986.30  
Descriptions By: Jeff Bishop

Well ID: GMA2-6  
Client: General Electric Company  
Location: Oxbow Areas J and K  
Groundwater Management Area 2  
1350 East St. - Pittsfield, MA



**BBL**  
BLASLAND, BOUCK & LEE, INC.  
engineers & scientists

Remarks: NA = Not Available/Not Applicable.

#### Water Level Data

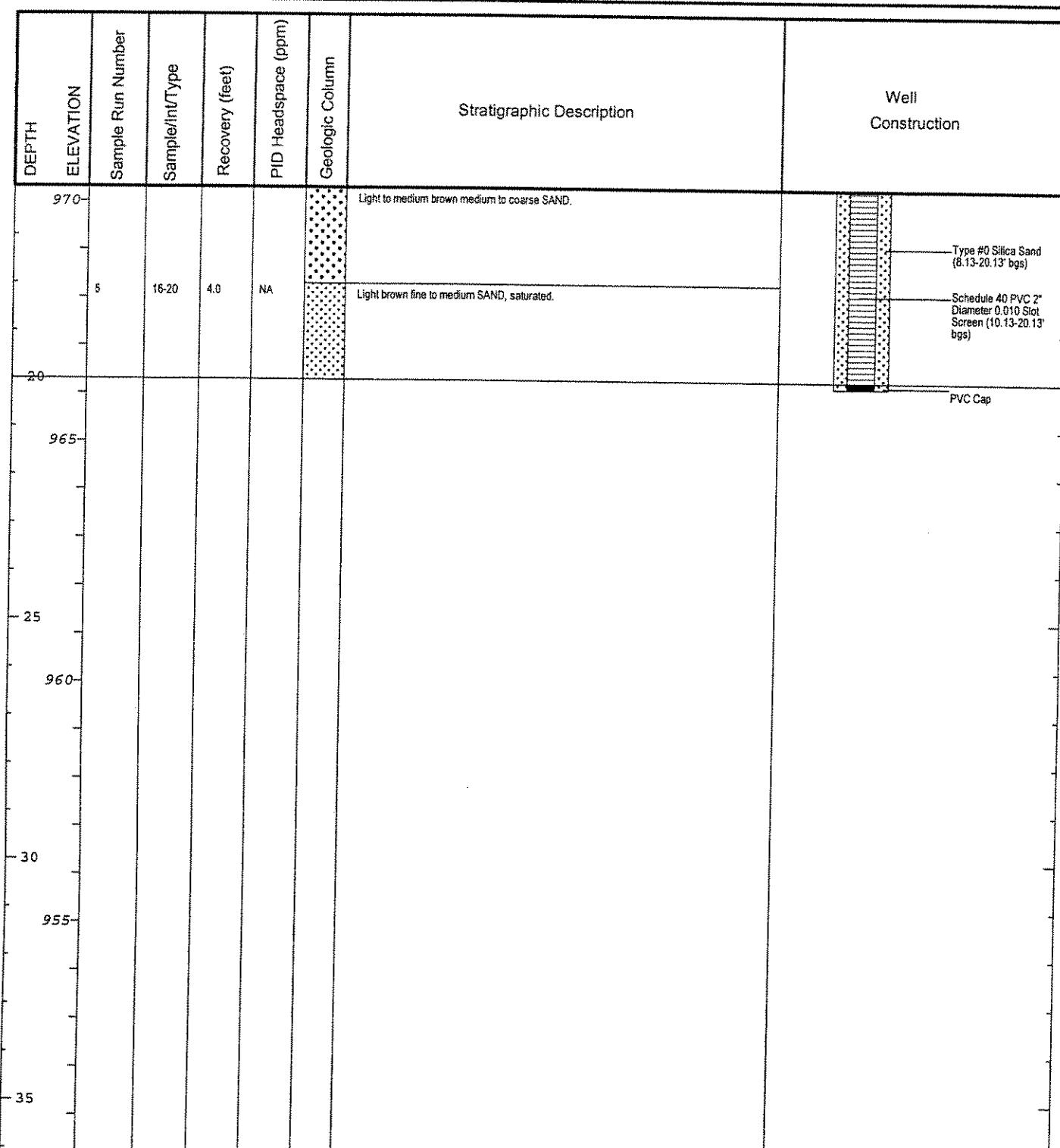
Date	Depth	Elev.
7/16/02	15.68	974.05

**Client:**  
General Electric Company

**Well ID:** GMA2-6

**Site Location:**  
Oxbow Areas J and K  
Groundwater Management Area 2  
1350 East St. - Pittsfield, MA

**Borehole Depth:** 20' bgs

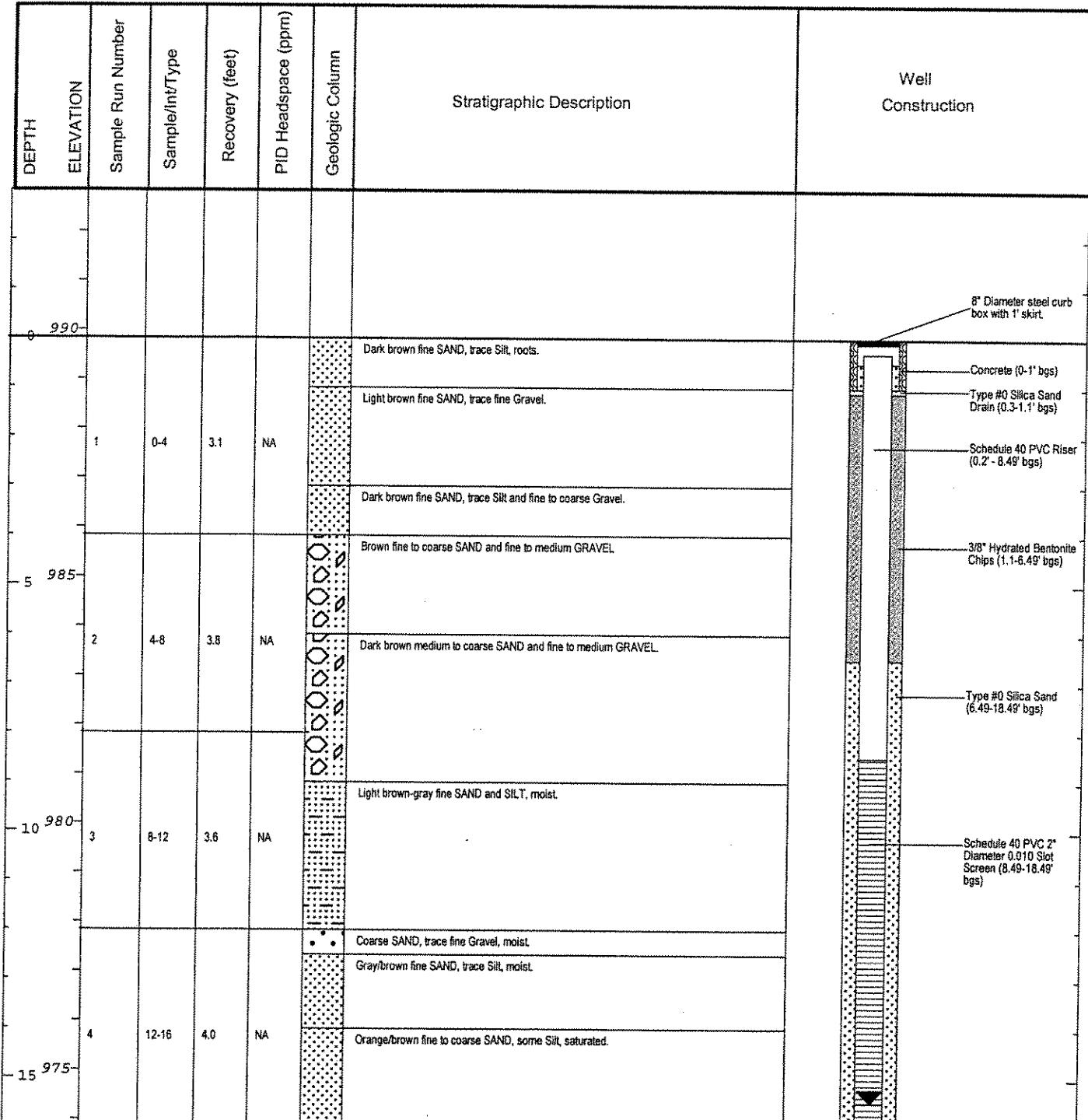


**Remarks:** NA = Not Available/Not Applicable.

**Water Level Data**

Date	Depth	Elev.
7/16/02	15.68	974.05

Date Start/Finish: 12/05/01 Drilling Company: BBLES Driller's Name: Joe Bishop Drilling Method: Direct Push/HSA Sampler Size: 4" x 2" ID Disposable Liner Auger Size: 4 1/4" ID Rig Type: Truck Mounted Power Probe 9600	Northing: 534452.3000 Easting: 136034.5000 Casing Elevation: 989.64  Borehole Depth: 16' bgs Surface Elevation: 989.84  Descriptions By: Jeff Bishop	Well ID: GMA2-7 Client: General Electric Company  Location: Oxbow Areas J and K Groundwater Management Area 2 1400 East St. - Pittsfield, MA
--	---	---



#### Remarks:

#### Water Level Data

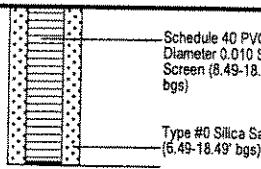
Date	Depth	Elev.
7/16/02	15.48	974.16

**Client:**  
General Electric Company

**Site Location:**  
Oxbow Areas J and K  
Groundwater Management Area 2  
1400 East St. - Pittsfield, MA

Well ID: GMA2-7

Borehole Depth: 16' bgs

DEPTH	ELEVATION	Stratigraphic Description					Well Construction
		Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	
20.970							 <p>Schedule 40 PVC 2" Diameter 0.010 Slot Screen (8.49-18.49' bgs)  Type #0 Silica Sand (5.49-18.49' bgs)  PVC Cap</p>
25.965							
30.960							
35.955							



Remarks:

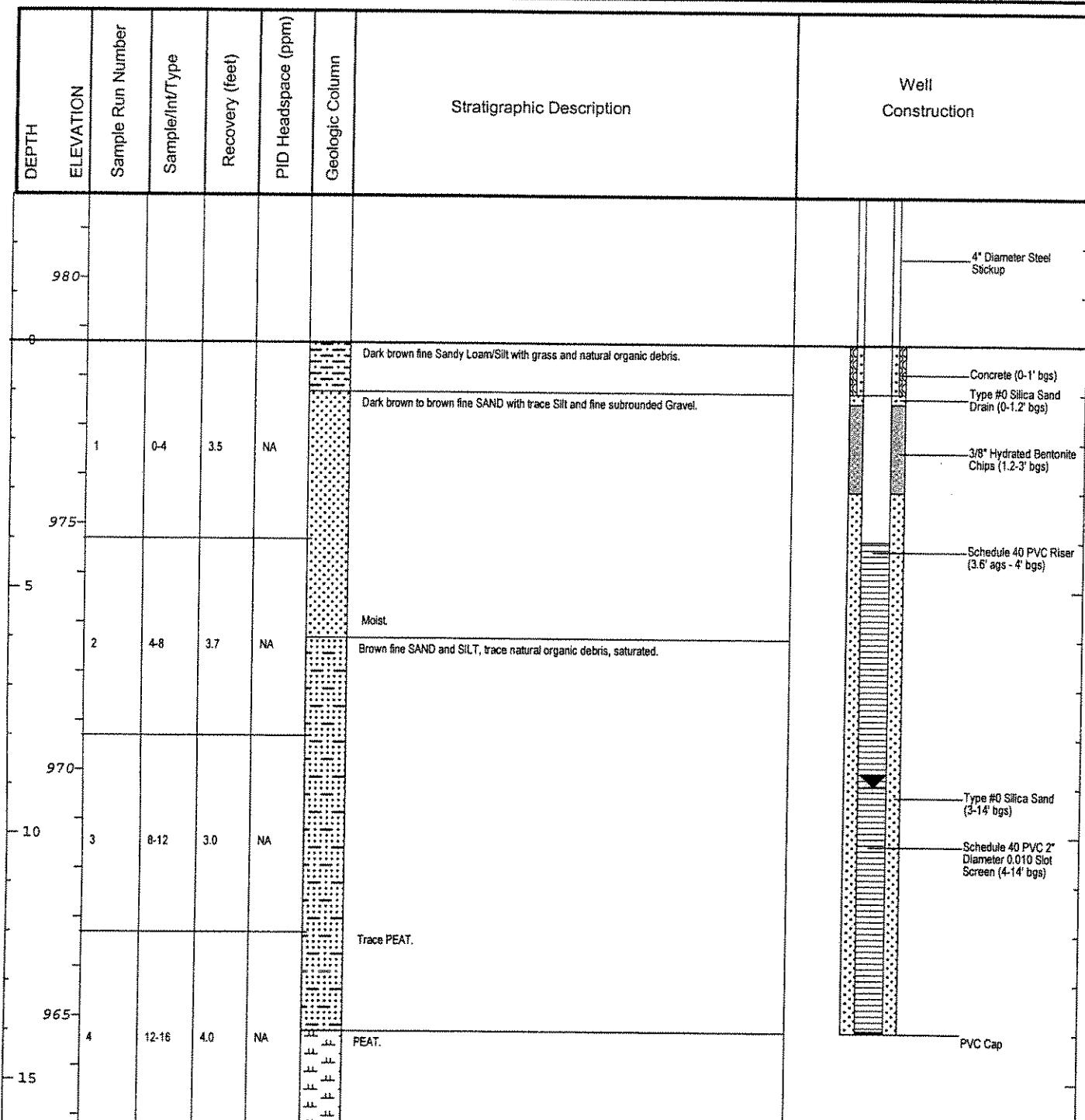
**Water Level Data**

Date	Depth	Elev.
7/16/02	15.48	974.16

Date Start/Finish: 10/19/01  
Drilling Company: BBLES  
Driller's Name: Joe Bishop  
Drilling Method: Direct Push/HSA  
Sampler Size: 4' x 2" ID Disposable Liner  
Auger Size: 4 1/4" ID  
Rig Type: Truck Mounted Power Probe 9600

Northing: 534235.5000  
Easting: 135923.1000  
Casing Elevation: 982.30  
Borehole Depth: 16' bgs  
Surface Elevation: 978.70  
Descriptions By: Jeff Bishop

Well ID: GMA2-8  
Client: General Electric Company  
Location: Oxbow Areas J and K  
Groundwater Management Area 2  
Lot K10-10-33 Pittsfield, MA



Remarks: NA = Not Available/Not Applicable.

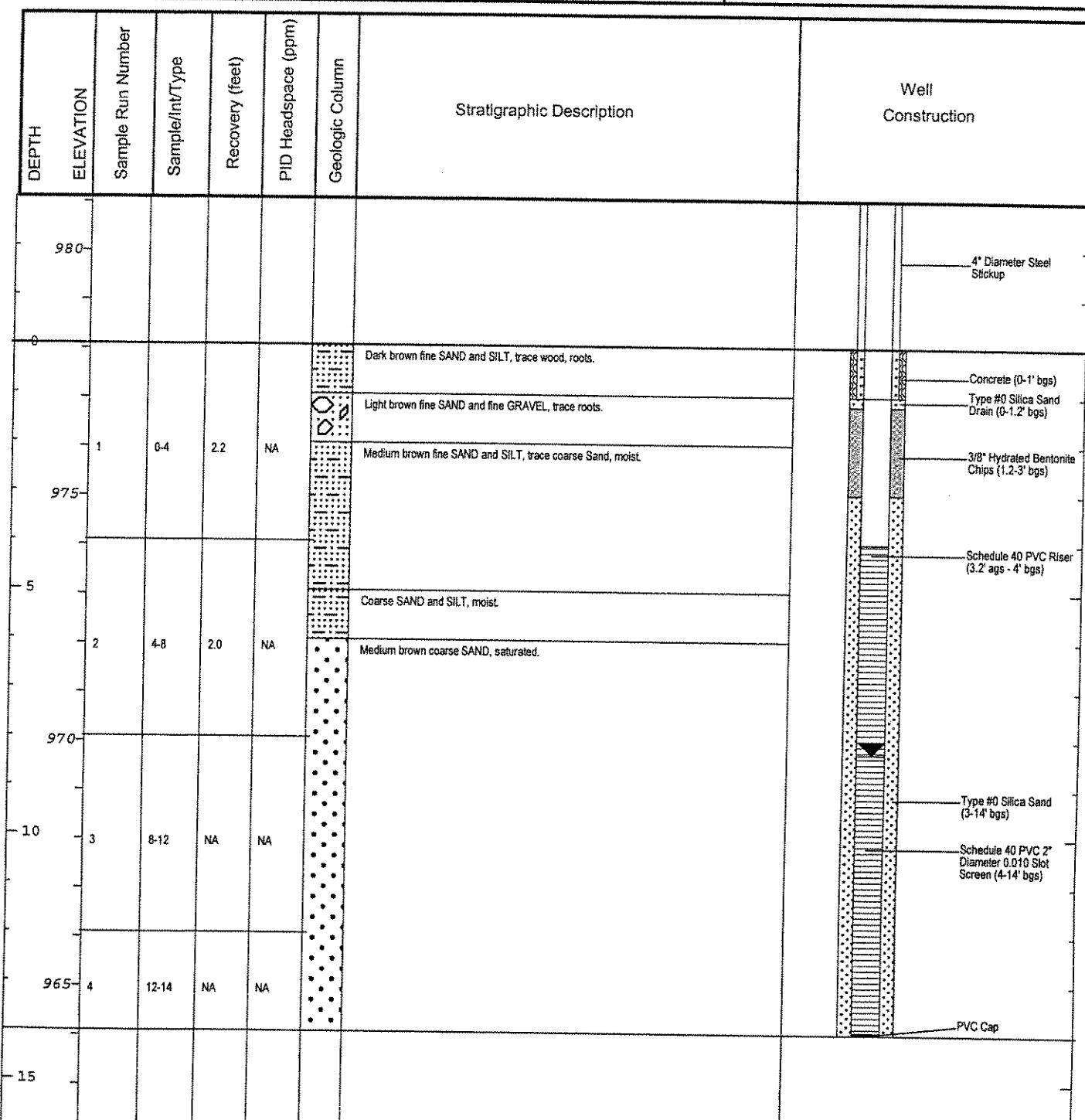
#### Water Level Data

Date	Depth	Elev.
7/17/02	8.98	973.32

Date Start/Finish: 10/18/01  
Drilling Company: BBLES  
Driller's Name: Joe Bishop  
Drilling Method: Direct Push/HSA  
Sampler Size: 4' x 2" ID Disposable Liner  
Auger Size: 4 1/4" ID  
Rig Type: Truck Mounted Power Probe 9600

Nothing: 534006.0000  
Easting: 135431.4000  
Casing Elevation: 981.29  
Borehole Depth: 14' bgs  
Surface Elevation: 978.10  
Descriptions By: Jeff Bishop

Well ID: GMA2-9  
Client: General Electric Company  
Location: Oxbow Areas J and K  
Groundwater Management Area 2  
Lot K10-10-03 - Pittsfield, MA



**Remarks:**  
NA = Not Available/Not Applicable.

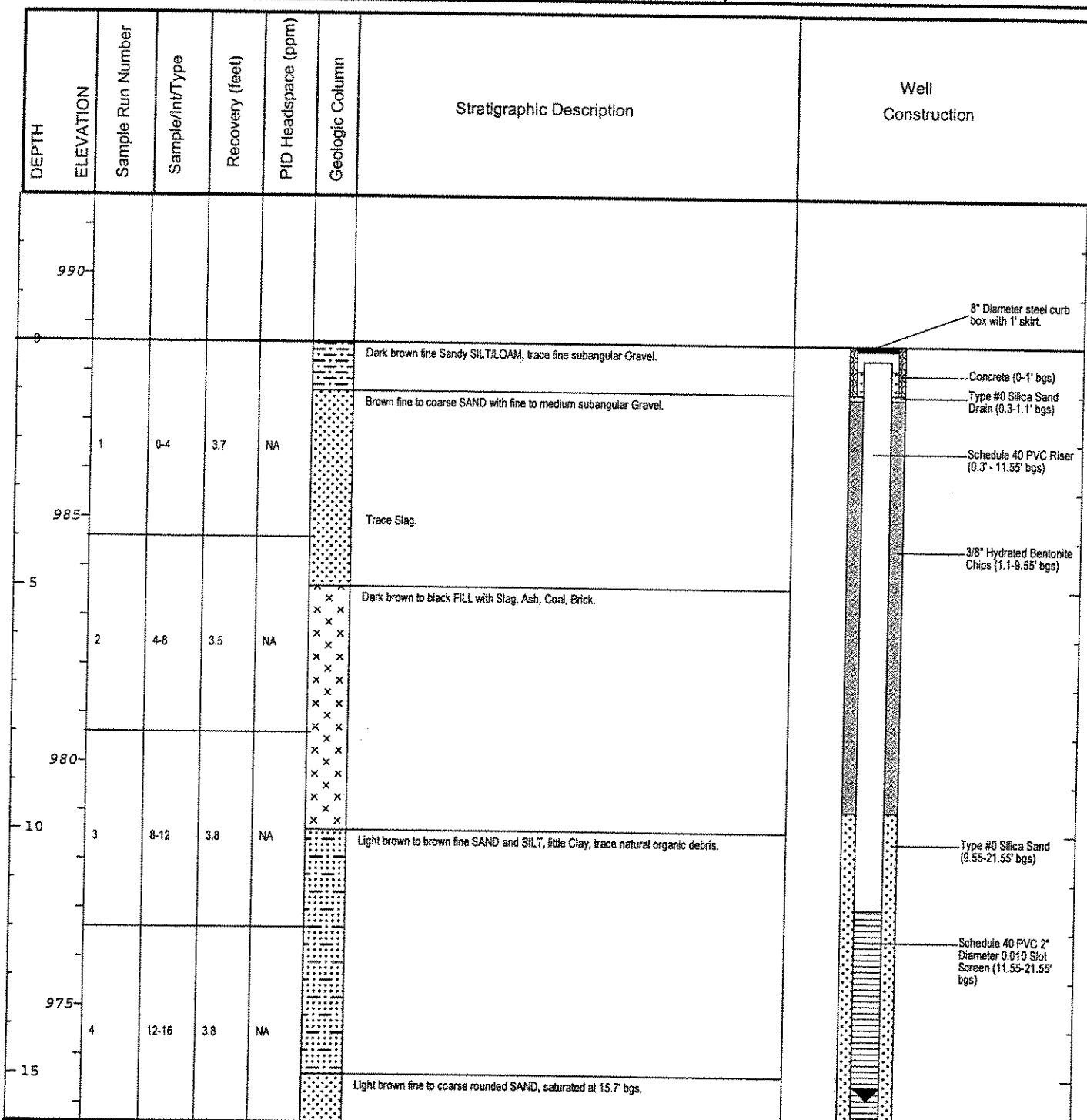
#### Water Level Data

Date	Depth	Elev.
7/17/02	8.28	973.01

Date Start/Finish: 10/19/01  
 Drilling Company: BBLES  
 Driller's Name: Joe Bishop  
 Drilling Method: Direct Push/HSA  
 Sampler Size: 4" x 2" ID Disposable Liner  
 Auger Size: 4 1/4" ID  
 Rig Type: Truck Mounted Power Probe 9600

Northing: 534035.6000  
 Easting: 135266.6000  
 Casing Elevation: 988.25  
 Borehole Depth: 20' bgs  
 Surface Elevation: 988.61  
 Descriptions By: Brett Karmeinski

Well ID: MW-J1R  
 Client: General Electric Company  
 Location: Oxbow Areas J and K  
 Groundwater Management Area 2  
 1328 East St. - Pittsfield, MA



**BBL**  
 BLASLAND, BOUCK & LEE, INC.  
 engineers & scientists

**Remarks:**  
 NA = Not Available.

#### Water Level Data

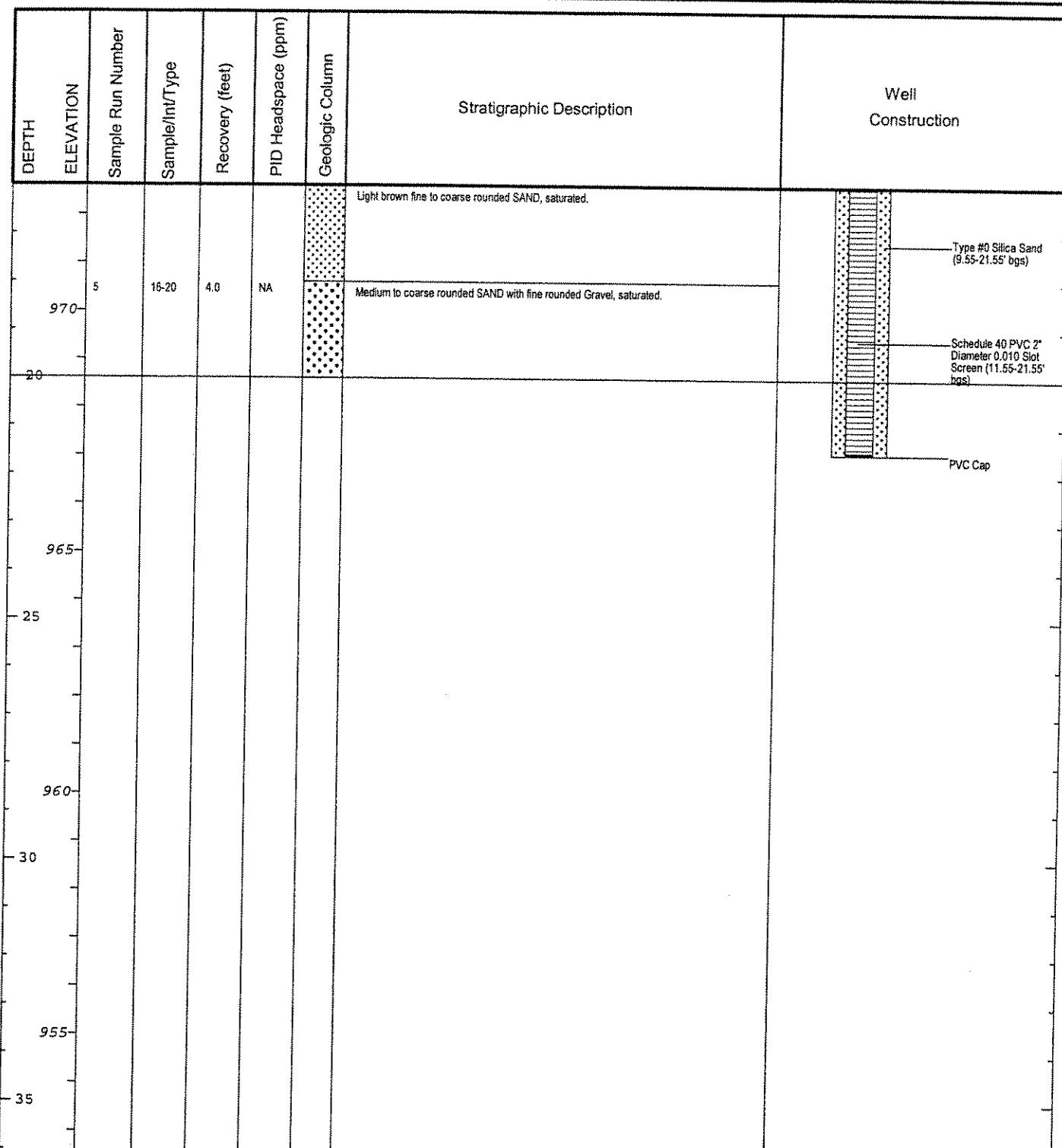
Date	Depth	Elev.
7/17/02	15.44	972.81

**Client:**  
General Electric Company

**Well ID:** MW-J1R

**Site Location:**  
Oxbow Areas J and K  
Groundwater Management Area 2  
1328 East St. - Pittsfield, MA

**Borehole Depth:** 20' bgs



**Remarks:**  
NA = Not Available.

**Water Level Data**

Date	Depth	Elev.
7/17/02	15.44	972.81

## ***Appendix B***

---

### **Field Sampling Data**

**BBL®**  
BLASLAND, BOUCK & LEE, INC.  
*engineers & scientists*



# CHAIN OF CUSTODY RECORD

**CT&E Environmental Services, Inc.**  
Laboratory Division

Locations Nationwide

- Alaska      • Louisiana
- Maryland    • Michigan
- New Jersey   • West Virginia

U18543

CLIENT ID#

CONTACT

PHONE NO: (415) 822-1181

PROJECT

Sample Arrival

SITE

G.E.P.H's field - GMA-Z

REPORT TO

W.M.C. Smith

FAX NO: (315) 445-9161

INVOICE TO

P.O. NUMBER: 30154001

LAB NO:

SAMPLE IDENTIFICATION

DATE

TIME

MATRIX

ITEM #

No

C

O

N

A

N

E

R

S

L

T

I

M

P

C

S

H

A

B

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

A

B

C

D



# CHAIN OF CUSTODY RECORD

**CT&E Environmental Services Inc.**  
Laboratory Division

Locations Nationwide:  
 • Alaska      • Louisiana  
 • Maryland    • Michigan  
 • New Jersey   • West Virginia  
[www.cteesi.com](http://www.cteesi.com)

018538

① CLIENT: **BBL**

CONTACT: **Gregg Rabasro**  
PROJECT: **Pasoline Semi-Annual**  
REPORTS TO:

PHONE NO: (415) 822-1184

SITE: **G.E. Pittsfield - GMA-2**

FAX NO: (315) 445-9161

INVOICE TO:

**Nick Smith**

P.O. NUMBER: **301.54.001**

PAGE **1** OF **1**

CT&E Reference

No.	SAMPLE TYPE	Preservatives Used	Chain of Custody Log											
			C = Analysis Required	C = COMP	G = GRAB	③	④	⑤	⑥	⑦	⑧	⑨	⑩	
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
32														
33														
34														
35														
36														
37														
38														
39														
40														
41														
42														
43														
44														
45														
46														
47														
48														
49														
50														
51														
52														
53														
54														
55														
56														
57														
58														
59														
60														
61														
62														
63														
64														
65														
66														
67														
68														
69														
70														
71														
72														
73														
74														
75														
76														
77														
78														
79														
80														
81														
82														
83														
84														
85														
86														
87														
88														
89														
90														
91														
92														
93														
94														
95														
96														
97														
98														
99														
100														

5 Collected/Relinquished By: (1)  
**Gregg Rabasro**  
 Gregg Rabasro  
 Relinquished By: (2)  
**Dave W.**  
 Relinquished By: (3)  
 Relinquished By: (4)

4 Shipping Carrier:  
 Samples Received/Cold? (Circle) YES NO  
 Shipping Ticket No.:  
 Temperature: °C  
 Special Deliverable Requirements:  
 Chain of Custody Seal? (Circle)  
 INTACT  BROKEN  ABSENT  
 Requested Turnaround Time and Special Instructions:  
**Standard Turnaround Time**  
 White Retained by Lab Pink Retained by Sampler

## GROUNDWATER SAMPLING FIELD LOG

Well No. GMA 2-1  
 Key No. FX-32  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site Name GMA-2  
 Sampling Personnel CAR/EDR  
 Date 9/15/02 Time In/Out 10:20 / 13:45  
 Weather Overscast, 55-60°

## WELL INFORMATION

	TIC	BGL
Reference Point Marked on Casing	Yc.	
Height of Ref. Pt. Relative to Grade	+3.5'	
Well Diameter	2"	
Well Depth	26.97'	
Screen Interval Depth	16.3-24.8'	
Water Table Depth	15.12'	
Intake Depth of Pump/Tubing	21.3'	

Redevelop? Y N

## WELL WATER INFORMATION

Length of Water Column	11.85'
Volume of Water in Well	1.93 gallons
Minutes of Pumping	145

## EVACUATION INFORMATION

Volume of water removed from well

Did well go dry? Y  NWater Quality Meter Type(s) / Serial Numbers: Horiba - 6228 gallons(5 gallons of sample)Evacuation Method: Bailer () Pump ()Pump Type: QED Sample Pro Blaster Pump

Standard 8260B-VOCs

Full Appendix IX+J List

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (TIC)	Depth to Water	Temp. (Celsius)	pH	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)
11:05	250ml		15.38		11.6	6.54	0.743	157	5.94	76
11:10	200ml		15.44		8.3	6.85	0.783	99	2.73	42
11:15	200ml		15.43		8.1	7.05	0.765	56	1.88	-9
11:20	160ml		15.43		7.9	7.11	0.761	51	1.58	-23
11:25	160ml		15.43		7.6	7.17	0.755	76	1.27	-33
11:30	160ml		15.43		7.6	7.24	0.755	36	1.08	-44
11:35	160ml		15.43		7.8	7.27	0.761	35	0.97	-52
11:40	160ml		15.43		7.8	7.33	0.759	35	0.95	-54
11:45	160ml		15.43		7.7	7.31	0.755	33	0.94	-58
Final	—	15.50		7.6	7.32	0.755	32	0.92	-59	

## MISCELLANEOUS OBSERVATIONS/PROBLEMS

Initial Purge: Very light brown, no odor, no shearFinal Purge: Clear, odorless, no shearHigh Turbidity Readings 11:30: Gntu 11:40: Yntu\*# Weston/EPA collected a split sample for Full Appendix IX+J Analysis #\*

## SAMPLE DESTINATION

Laboratory: CTEDelivered Via: CourierAirbill #: NAField Sampling Coordinator: Greg L. Schaefer

## GROUNDWATER SAMPLING FIELD LOG

Well No. GMAZ-Z  
 Key No. FX-37  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.6

Site Name GMAZ  
 Sampling Personnel JJB/ERH  
 Date 7/13/02  
 Weather 59° F, cloudy, overcast  
 Time In / Out 0900 / 1205

## WELL INFORMATION

	TIC	BGL
Reference Point Marked on Casing	YES	
Height of Ref. Pt. Relative to Grade	2.98'	
Well Diameter	2"	
Well Depth	23.00'	
Screen Interval Depth	13. - 23.'	
Water Table Depth	16.51'	
Intake Depth of Pump/Tubing	20.78'	

Redevelop? Y N

## WELL WATER INFORMATION

Length of Water Column	8.49'
Volume of Water in Well	1.38 gallons
Minutes of Pumping	155 minutes

## EVACUATION INFORMATION

Volume of water removed from well

7.0 gallons

Evacuation Method: Bailer ( ) Pump (X)

Did well go dry? Y N

Pump Type: INCO 180 PORTABLE PUMP

Water Quality Meter Type(s) / Serial Numbers: HORIBA V22

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (TIC)	Depth to Water	Temp. (Celsius)	pH	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)
0920	180 ml.	.20	16.93'		13.96	6.74	0.742	62	7.06	112
0925	150 ml.	.40	16.93'		13.82	6.86	0.746	44	6.09	96
0930	180 ml.	.60	16.93'		13.28	6.90	0.747	10	5.92	86
0935	150 ml.	.80	16.93'		13.19	6.90	0.746	9	5.86	71
0940	150 ml.	1.0	16.93'		13.43	6.92	0.744	7	5.73	70
0945	150 ml.	1.2	16.93'		13.12	6.94	0.748	7	5.72	68
0950	180 ml.	1.4	16.93'		13.02	6.94	0.747	6	5.70	68
Final	180 ml.	7.0 LTR.	16.58'		13.02	7.03	0.742	4	5.78	60

## MISCELLANEOUS OBSERVATIONS/PROBLEMS

VOCs collected utilizing a response Teflon basket.

Initial pump: clear, slightly turbid, no shear, no odor  
Final pump: clear, slightly turbid, no shear, no odor

## SAMPLE DESTINATION

Laboratory: CT & E ) CHARLESTON, WV

Delivered Via: CT & E CONVER

Airbill #: \_\_\_\_\_

Field Sampling Coordinator:

## GROUNDWATER SAMPLING FIELD LOG

Well No. GMAZ-3  
 Key No. NIA  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.3

## Sampling Personnel

Site Name GMAZ  
 Sampling Personnel JJB/BRH  
 Date 4/19/02  
 Weather SUNNY, 73°F

## WELL INFORMATION

	TIC	BGL
Reference Point Marked on Casing	<u>YES</u>	
Height of Ref. Pt. Relative to Grade		<u>.12</u>
Well Diameter	<u>2"</u>	
Well Depth	<u>18.40'</u>	
Screen Interval Depth		<u>8.5 - 18.5'</u>
Water Table Depth	<u>14.73'</u>	
Intake Depth of Pump/Tubing	<u>16.5'</u>	

Redevelop? Y N

## WELL WATER INFORMATION

Length of Water Column	<u>3.67'</u>
Volume of Water in Well	<u>.60 GALLONS</u>
Minutes of Pumping	<u>3.5 MINUTES</u>

## EVACUATION INFORMATION

Volume of water removed from well 1.5 GALLONS  
 Did well go dry? Y N

Evacuation Method: Bailer () Pump ()  
 Pump Type: ISO 150 PORTABLE PUMP

Water Quality Meter Type(s) / Serial Numbers: HORIBA VZ

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (TIC)	Depth to Water	Temp. (Celsius)	pH	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)
1013	125 ml.	.17 gal.	15.02'		19.12	7.09	3.38	89	10.66	65
1020	125 ml.	.37 gal.	15.11'		18.18	6.90	3.53	162	3.21	53
1025	125 ml.	.51	15.16'		16.95	6.87	3.51	191	3.58	50
1030	125 ml.	.68	15.21'		16.08	6.85	3.51	94	3.45	39
1035	125 ml.	.85	15.22'		16.00	6.85	3.82	69	3.32	26
1040	(25 ml.)	1.02	15.23'		16.02	6.86	3.58	55	3.33	24
1045	125 ml.	1.19	15.24'		16.02	6.88	3.58	46	3.35	23
Final	125 ml.	1.5 GAL.	14.80'		16.15	6.87	3.78	52	3.47	24

## MISCELLANEOUS OBSERVATIONS/PROBLEMS

\* VOCs detected utilizing a disposable Teflon bailedINITIAL PURGE: cloudy, moderately turbid, no smell, no odorFINAL PURGE: clear, slightly turbid, no smell, no odor

## SAMPLE DESTINATION

Laboratory: CTE' CHARLESTON, WV  
 Delivered Via: CTE' CENTER  
 Airbill #: \_\_\_\_\_

Field Sampling Coordinator:

JJM

## GROUNDWATER SAMPLING FIELD LOG

Well No. GMAZ-4  
 Key No. FX-37  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site Name GMAZ-4  
 Sampling Personnel DEC-LITC  
 Date 4/17/02 Time In / Out 09:00  
 Weather Sunny 70°

## WELL INFORMATION

	TIC	BGL
Reference Point Marked on Casing	Y	—
Height of Ref. Pt. Relative to Grade	—	—
Well Diameter	2"	—
Well Depth	17.77	—
Screen Interval Depth	—	5.2-15.2
Water Table Depth	8.29	—
Intake Depth of Pump/Tubing	—	~11 (DEE)

Redevelop? Y N

## WELL WATER INFORMATION

Length of Water Column	9.48'
Volume of Water in Well	1.54 gallons
Minutes of Pumping	175 min.

## EVACUATION INFORMATION

Volume of water removed from well

Did well go dry? Y ~5gallonsEvacuation Method: Bailer ( ) Pump ()Pump Type: GEOTECH GEDPUMP2Water Quality Meter Type(s) / Serial Numbers: U-22 Horiba w/ Flow through cell + 2100D PH/Turbidity meter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (TIC)	Depth to Water	Temp. (Celcius)	pH	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)
0910	320ml	when	8.42	—	8.38	6.59	.477	46/18	0.0	-42
0915	300 ml		8.44	—	8.52	6.62	.471	11/6	0.0	-50
0920	220ml		8.43	—	8.74	6.69	.469	3/5	0.0	-69
0930	220ml		8.43	—	8.77	6.64	.469	-4/3	0.0	-92
0940	220ml		8.43	—	8.90	6.79	.468	-8/4	0.0	-107
0950	220ml		8.43	—	8.82	6.87	.464	-10/2	0.0	-120
1000	220ml		8.43	—	8.84	6.91	.467	-10/2	0.0	-128
Final			<u>~5gallons</u>							

## MISCELLANEOUS OBSERVATIONS/PROBLEMS

initial sample: water is clear in color w/ organic odor. EPA (WESTON) did splits on this well. Turbidity taken from the U-22 Horiba appears to be ~~wrong~~ malfunctioning

## SAMPLE DESTINATION

Laboratory: CT+E  
 Delivered Via: Courier  
 Airbill #: N/A

Field Sampling Coordinator: GAP

## GROUNDWATER SAMPLING FIELD LOG

Well No. GMAZ-5  
 Key No. FX-37  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site Name GMAZ  
 Sampling Personnel JJB/EAH  
 Date 7/17/02 Time In / Out 0800 / 1000  
 Weather 63°F, sunny

## WELL INFORMATION

	TIC	BGL
Reference Point Marked on Casing	<u>VS</u>	
Height of Ref. Pt. Relative to Grade		<u>-30</u>
Well Diameter	<u>2"</u>	
Well Depth	<u>16.08'</u>	
Screen Interval Depth		<u>6.16'</u>
Water Table Depth	<u>9.32'</u>	
Intake Depth of Pump/Tubing	<u>13.0'</u>	

Redevelop? Y N

## WELL WATER INFORMATION

Length of Water Column	<u>6.76</u>
Volume of Water in Well	<u>1.10 gallons</u>
Minutes of Pumping	<u>100 minutes</u>

## EVACUATION INFORMATION

Volume of water removed from well 3.5 gallons

Did well go dry? Y Q

Evacuation Method: Bailer ( ) Pump (X)

Pump Type: 1360 180 PORTABLE PUMP

Water Quality Meter Type(s) / Serial Numbers:

Hach 210 U22

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (TIC)	Depth to Water	Temp. (Celsius)	pH	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)
0810	178 ml.	.83	9.34		12.50	7.87	6.95	10	9.99	42
0815	178 ml.	.96	9.34		11.89	7.99	5.87	8	7.03	43
0820	178 ml.	.69	9.34		11.89	7.96	5.91	8	7.22	43
0825	178 ml.	.92	9.34		11.34	7.93	5.90	6	6.90	44
0830	178 ml.	1.15	9.34		11.28	7.91	5.88	5	7.02	44
0835	178 ml.	1.38	9.34		11.20	7.90	5.88	4	7.01	44
0840	178 ml.	1.61	9.34		11.21	7.89	5.85	2	7.02	43
Final	178 ml.	4.5601	9.32'		11.22	7.82	5.92	2	7.10	48

## MISCELLANEOUS OBSERVATIONS/PROBLEMS

"No" collected utilized no sampling reason outside.

DOWNFALL: CLEAR, SUBSTANTIALLY THICKED, NO SINTER, NO ODM  
 DOWNFALL: CLEAR, SUBSTANTIALLY THICKED, NO SINTER, NO ODM

## SAMPLE DESTINATION

Laboratory: CTDE, CHARLESTON, WV  
 Delivered Via: CTDE COURIER

Airbill #:

Field Sampling Coordinator:

GROUNDWATER SAMPLING FIELD LOG

Well No. GMAZ-6  
 Key No. FX-37  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site Name GMAZ-6  
 Sampling Personnel DEG/JTC  
 Date 5/1/98  
 Weather Time In / Out 10:30 / 1400  
Sunny 65° F

**WELL INFORMATION**

	TIC	BGL
Reference Point Marked on Casing	Y	—
Height of Ref. Pt. Relative to Grade	—	—
Well Diameter	2"	—
Well Depth	23.28	—
Screen Interval Depth	—	10.15 - 20.15
Water Table Depth	~11.63	
Intake Depth of Pump/Tubing	~18	

Redevelop? Y N

**WELL WATER INFORMATION**

Length of Water Column	8.65'
Volume of Water in Well	1.41
Minutes of Pumping	119 min

**EVACUATION INFORMATION**

Volume of water removed from well

~4 gallonsEvacuation Method: Bailer ( ) Pump ()Did well go dry? Y  N Pump Type: GEOGRAPHIC GEOFLOWWater Quality Meter Type(s) / Serial Numbers: 11-22. Horiba / 2100P Hoch Turbidity meter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (TIC)	Depth to Water	Temp. (Celcius)	pH	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)
10:45	240 ml	Initial	14.64	—	9.26	6.21	2.81	2493	2.75	100
10:50	240 ml		14.64	—	7.27	6.30	2.27	180/68	0.77	43
11:00	240 ml		14.63	—	7.14	6.40	1.96	56/23	0.33	16
11:10	240 ml		14.63	—	7.51	6.53	1.98	38/12	0.00	-9
11:20	240 ml		14.63	—	7.48	6.63	2.01	24/7	0.00	-22
11:30	240 ml		14.63	—	7.63	6.66	2.02	15/5	0.00	-31
11:40	240 ml		14.63	—	7.45	6.67	2.03	19/4	0.00	-34
11:50	240 ml		14.63	—	7.95	6.70	2.02	17/3	0.00	-38
↓										
Final	240 ml	~4 gal/b	14.63	—						

**MISCELLANEOUS OBSERVATIONS/PROBLEMS**initial purge water has a slight odor w/ light brown in color**SAMPLE DESTINATION**Laboratory: CT+EDelivered Via: CourierAirbill #: N/AField Sampling Coordinator: GAR

GROUNDWATER SAMPLING FIELD LOG

Well No. GMA2 - 7  
 Key No. FX-37  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site Name GMA2  
 Sampling Personnel DEG/JTG  
 Date 4/15/02 Time In / Out 1510 /  
 Weather Sunny mid 70's

**WELL INFORMATION**

	TIC	BGL
Reference Point Marked on Casing	y	—
Height of Ref. Pt. Relative to Grade	—	—
Well Diameter	2"	—
Well Depth	18.28	—
Screen Interval Depth	—	8.49 - 18.47
Water Table Depth	14.20	—
Intake Depth of Pump/Tubing	—	~16.0'

Redevelop? Y N

**WELL WATER INFORMATION**

Length of Water Column	4.08'
Volume of Water in Well	0.67 gallons
Minutes of Pumping	103 min.

**EVACUATION INFORMATION**

Volume of water removed from well

~2

Evacuation Method: Bailer ( ) Pump ()Did well go dry? Y  NPump Type: ISCO peristaltic pumpWater Quality Meter Type(s) / Serial Numbers: U-22 Horiba w/ Flow through cell / 2100P Hoch Turbidity meter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (TIC)	Depth to Water	Temp. (Celcius)	pH	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)
15:25	200ml	initial	14.23	—	12.67	6.84	2.49	120/32	5.09	94
15:30	120 ml		14.23	—	13.71	6.83	2.46	58/35	4.71	94
15:35	320 ml		14.23	—	11.47	6.83	2.47	76/28	3.86	95
15:45	260 ml		14.23	—	11.61	6.83	2.42	27/6	4.15	95
15:55	260 ml		14.23	—	12.00	6.83	2.40	40/3	4.10	95
16:05	260ml		14.23	—	12.23	6.83	2.39	80/2	4.30	93
Final		~2								

**MISCELLANEOUS OBSERVATIONS/PROBLEMS**Initial Purge: Water was clear w/ no color.**SAMPLE DESTINATION**

Laboratory: CT+E  
 Delivered Via: COURIER  
 Airbill #: N/A

Field Sampling Coordinator: GAR

## GROUNDWATER SAMPLING FIELD LOG

Well No. GMA2-8  
 Key No. TX-37  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site Name GMAZ  
 Sampling Personnel DEG/JTG  
 Date 4/1/99  
 Weather Sunny 80's

## WELL INFORMATION

	TIC	BGL
Reference Point Marked on Casing	Y	—
Height of Ref. Pt. Relative to Grade	—	—
Well Diameter	2"	—
Well Depth	17.19	—
Screen Interval Depth	—	4-14
Water Table Depth	7.30	—
Intake Depth of Pump/Tubing	—	~12

Redevelop? Y N

## WELL WATER INFORMATION

Length of Water Column	<u>9.89'</u>
Volume of Water in Well	<u>1.601 gallons</u>
Minutes of Pumping	<u>115 min.</u>

## EVACUATION INFORMATION

Volume of water removed from well

Did well go dry? Y N

~ 2 gallons Evacuation Method: Bailer ( ) Pump (X)  
 Pump Type: Isco peristaltic pump  
 Water Quality Meter Type(s) / Serial Numbers: U-22 Horiha w/ Flow through Cell & 2100P Hand Turbidity meter

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (TIC)	Depth to Water	Temp. (Celcius)	pH	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)
14:40	120ml	initial	7.35	—	19.76	7.27	.445	46/10	7.31	-94
14:45	120ml		7.35	—	18.89	7.20	.417	8/4	5.39	-9
14:50	180ml		7.35	—	16.81	7.13	.404	41/3	2.80	-116
14:55	180ml		7.35	—	17.48	7.11	.401	18/4	1.69	-125
15:05	180ml		7.35	—	17.17	7.08	.397	22/2	1.68	-121
15:15	180ml		7.35	—	17.20	7.11	.397	7/2	0.08	-124
Final		<u>~2 gallons</u>								

## MISCELLANEOUS OBSERVATIONS/PROBLEMS

Initial purge: clear w/ no odor.

## SAMPLE DESTINATION

Laboratory: CT+E  
 Delivered Via: Courier  
 Airbill #: N/A

Field Sampling Coordinator: GAR

GROUNDWATER SAMPLING FIELD LOG

Well No. GMA Z-9  
 Key No. Fx-37  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site Name GMA-Z  
 Sampling Personnel GARI/JDB  
 Date 4/17/02 Time In / Out 11:00 / 13:20  
 Weather Sunny, 80-85°F

**WELL INFORMATION**

	TIC	BGL
Reference Point Marked on Casing	YcJ	
Height of Ref. Pt. Relative to Grade	+3'	
Well Diameter	2"	
Well Depth	17.03'	
Screen Interval Depth	7'-17'	
Water Table Depth	7.09'	
Intake Depth of Pump/Tubing	12.1'	

Redevelop? Y N

**WELL WATER INFORMATION**

Length of Water Column	<u>7.94'</u>
Volume of Water in Well	<u>1.62 gallon</u>
Minutes of Pumping	<u>90'</u>

**EVACUATION INFORMATION**

Volume of water removed from well

4.5 gallonsDid well go dry? Y  N 

Evacuation Method: Bailer ( ) Pump (X)

Pump Type: OED Sample Pro Bladder PumpWater Quality Meter Type(s) / Serial Numbers: Horiba -u22

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (TIC)	Depth to Water	Temp. (Celsius)	pH	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)
11:37	400ml		7.95		12.0	6.45	0.270	116	14.00	84
11:40	260ml		7.26		11.6	6.45	0.248	77	6.83	81
11:45	190ml		7.31		11.3	6.57	0.249	33	5.38	78
11:50	190ml		7.31		10.8	6.59	0.244	15	4.76	75
11:55	190ml		7.32		10.5	6.64	0.242	4	4.52	75
12:00	190ml		7.32		10.2	6.58	0.247	0	4.10	73
12:05	190ml		7.33		10.3	6.56	0.250	0	3.68	71
12:10	190ml		7.33		10.3	6.57	0.253	0	3.73	70
Final			7.35		10.1	6.54	0.256	1	3.45	69

**MISCELLANEOUS OBSERVATIONS/PROBLEMS**

Initial Purge: Clear, odorless, no shear  
Final Purge: Clear, odorless, no shear  
High Turbidity Readings: 12:00: 9ntu 12:10: 5ntu

**SAMPLE DESTINATION**Laboratory: CT4EDelivered Via: CourierAirbill #: NAField Sampling Coordinator: Gregg L. Johnson

GROUNDWATER SAMPLING FIELD LOG

Well No. J-1R  
 Key No. FX-33  
 PID Background (ppm) 0  
 Well Headspace (ppm) 0

Site Name GMA -2  
 Sampling Personnel CAR/JDB  
 Date 9/13/02 Time In / Out 14:00 / 17:15  
 Weather Mostly sunny, 65-70°F

**WELL INFORMATION**

	TIC	BGL
Reference Point Marked on Casing	Yes	
Height of Ref. Pt. Relative to Grade	- 6"	
Well Diameter	2"	
Well Depth	21.00	
Screen Interval Depth	12.85' - 12.85'	
Water Table Depth	13.81	
Intake Depth of Pump/Tubing	17.4'	

Redevelop? Y N

**WELL WATER INFORMATION**

Length of Water Column	7.19'
Volume of Water in Well	1.17 gallon
Minutes of Pumping	145'

**EVACUATION INFORMATION**

Volume of water removed from well

Did well go dry? Y N39.611ons(5 gallons of sample)

Evacuation Method: Bailer ( ) Pump (X)

Pump Type: QED Sump Pro Blaster PumpWater Quality Meter Type(s) / Serial Numbers: Horiba -u22

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (TIC)	Depth to Water	Temp. (Celsius)	pH	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)
14:40	220ml		13.79		15.2	6.69	1.77	470	3.95	99
14:45	180ml		13.79		12.3	6.63	1.66	290	0.47	85
14:50	180ml		13.79		12.6	6.67	1.59	165	0.11	77
14:55	180ml		13.79		12.3	6.68	1.58	130	0.04	75
15:00	180ml		13.79		12.4	6.69	1.56	98	0.00	70
15:05	180ml		13.79		12.4	6.71	1.55	70	0.00	66
15:10	180ml		13.79		12.4	6.72	1.54	55	0.00	62
15:15	180ml		13.79		12.3	6.71	1.54	51	0.00	62
15:20	180ml		13.79		12.2	6.71	1.53	50	0.00	62
Final	—		13.70		11.7	6.71	1.51	50	0.00	63

**MISCELLANEOUS OBSERVATIONS/PROBLEMS**Initial Purge: Light-brown, odorless, no sheenFinal Purge: Clear, odorless, no sheenHach Turbidity Readings: 15:05: 21 ntu    15:15: 10 ntu    15:25: 8 ntu\*# Weston/EPA collected a split sample for Full Appendix 1x+3 Analysis #\***SAMPLE DESTINATION**Laboratory: C7+EDelivered Via: CourierAirbill #: NA

Field Sampling Coordinator:



## GROUNDWATER SAMPLING FIELD LOG

Well No. OJ-MW-2  
 Key No. N/A  
 PID Background (ppm) 0.0  
 Well Headspace (ppm) 0.0

Site Name GMAZ  
 Sampling Personnel 336/624  
 Date 4/19/02 Time In / Out 1430/1620  
 Weather 74°F, sunny

## WELL INFORMATION

	TIC	BGL
Reference Point Marked on Casing	YES	
Height of Ref. Pt. Relative to Grade		.38
Well Diameter	1"	
Well Depth	10.56'	
Screen Interval Depth		—
Water Table Depth	14.72'	
Intake Depth of Pump/Tubing	16.5'	

Redevelop? Y  N

## WELL WATER INFORMATION

Length of Water Column	3.84'
Volume of Water in Well	
Minutes of Pumping	90 MINUTES

## EVACUATION INFORMATION

Volume of water removed from well 4.5 GALLONS

Did well go dry? Y  N

Water Quality Meter Type(s) / Serial Numbers:

Evacuation Method: Bailer ( ) Pump (X)

Pump Type: 2500 150 PORTABLE PUMP

MORITA V22

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (TIC)	Depth to Water	Temp. (Celsius)	pH	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/l)	ORP (mV)
1440	175ml.	.23	*		20.34	7.15	0.96	114	12.13	60
1445	175ml.	.46	*		18.79	6.91	0.92	90	7.64	-68
1450	175ml.	.69	*		17.24	6.87	0.97	26	6.36	-70
1455	175ml.	.92	*		17.14	6.87	0.99	13	5.95	-73
1500	175ml.	1.15	*		17.10	6.86	0.99	13	5.84	-74
1505	175ml.	1.38	*		16.86	6.86	0.98	9	5.37	-91
1510	175ml.	1.61	*		16.79	6.86	1.02		5.36	-96
Final	175ml.	4.56 gal.	14.02'		16.76	6.85	1.02	2	5.15	-102

\* WATER LEVEL AT TIME OF PUMPING TO FLOOR OF WELL.

MISCELLANEOUS OBSERVATIONS/PROBLEMS "VOCs" COLLECTED UTILIZING A DISPOSABLE TRIPLE METER.

INVERTER AREA: CLOUDY, MODERATELY TURBID, NO SHEEN, NO DDL

STANDPIPE: CLEAR, SLIGHTLY TURBID, NO SHEEN, NO DDL.

## SAMPLE DESTINATION

Laboratory: CITE : CHARLESTON, WV  
 Delivered Via: CITE COURIER

Airbill #: \_\_\_\_\_

Field Sampling Coordinator: J.M.W.

## ***Appendix C***

---

### **Hydraulic Conductivity Data**



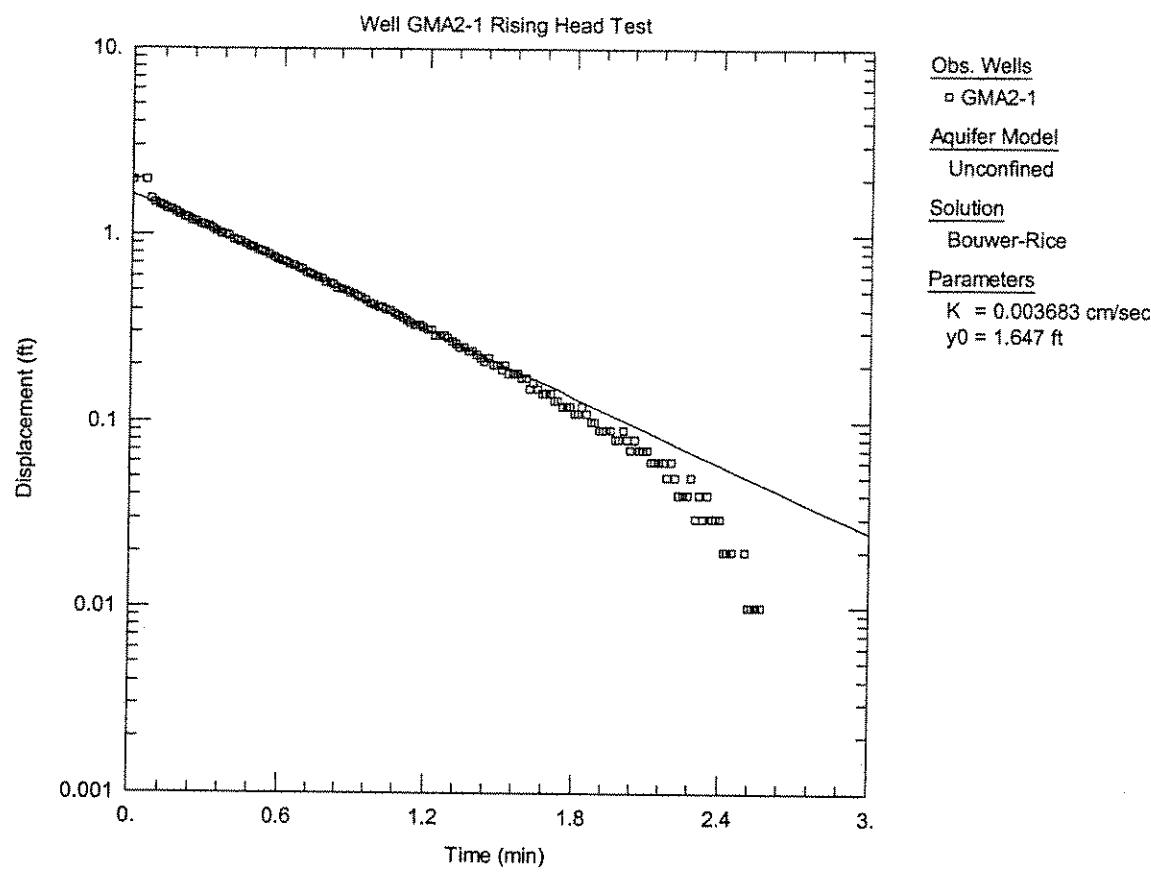


Figure C-1. Curve matching and calculation for hydraulic conductivity for monitoring well GMA2-1.

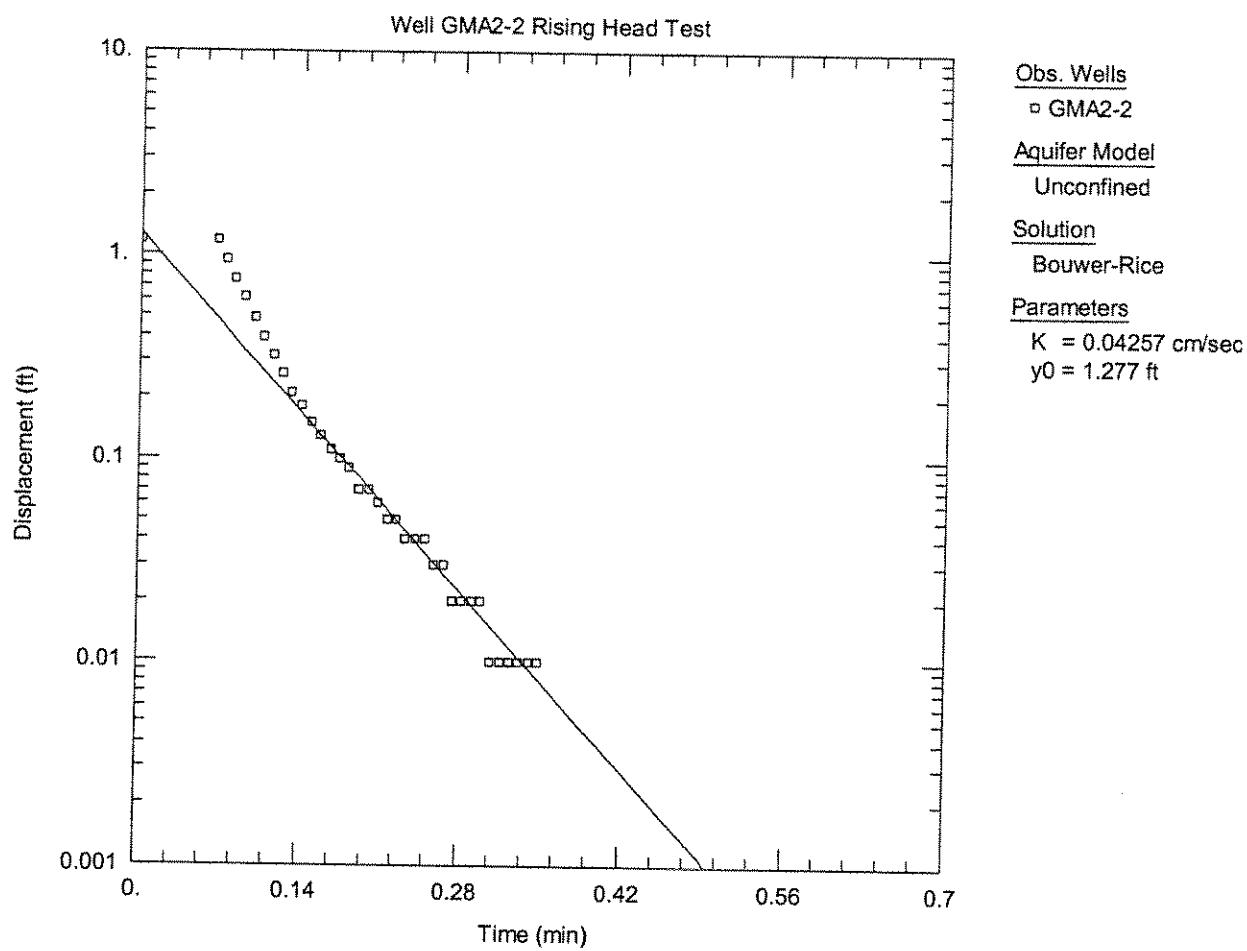


Figure C-2. Curve matching and calculation for hydraulic conductivity for monitoring well GMA2-2.

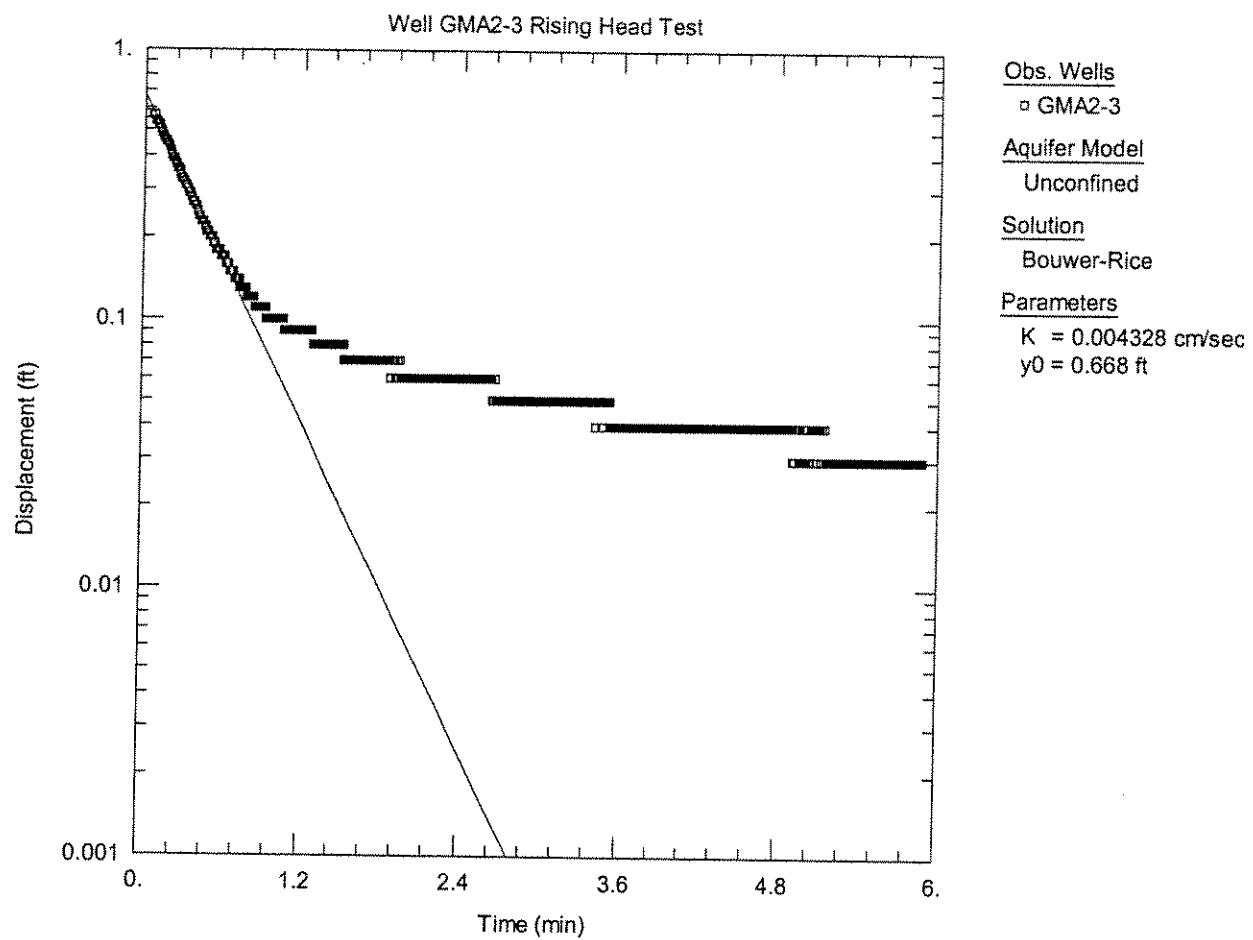


Figure C-3. Curve matching and calculation for hydraulic conductivity for monitoring well GMA2-3.

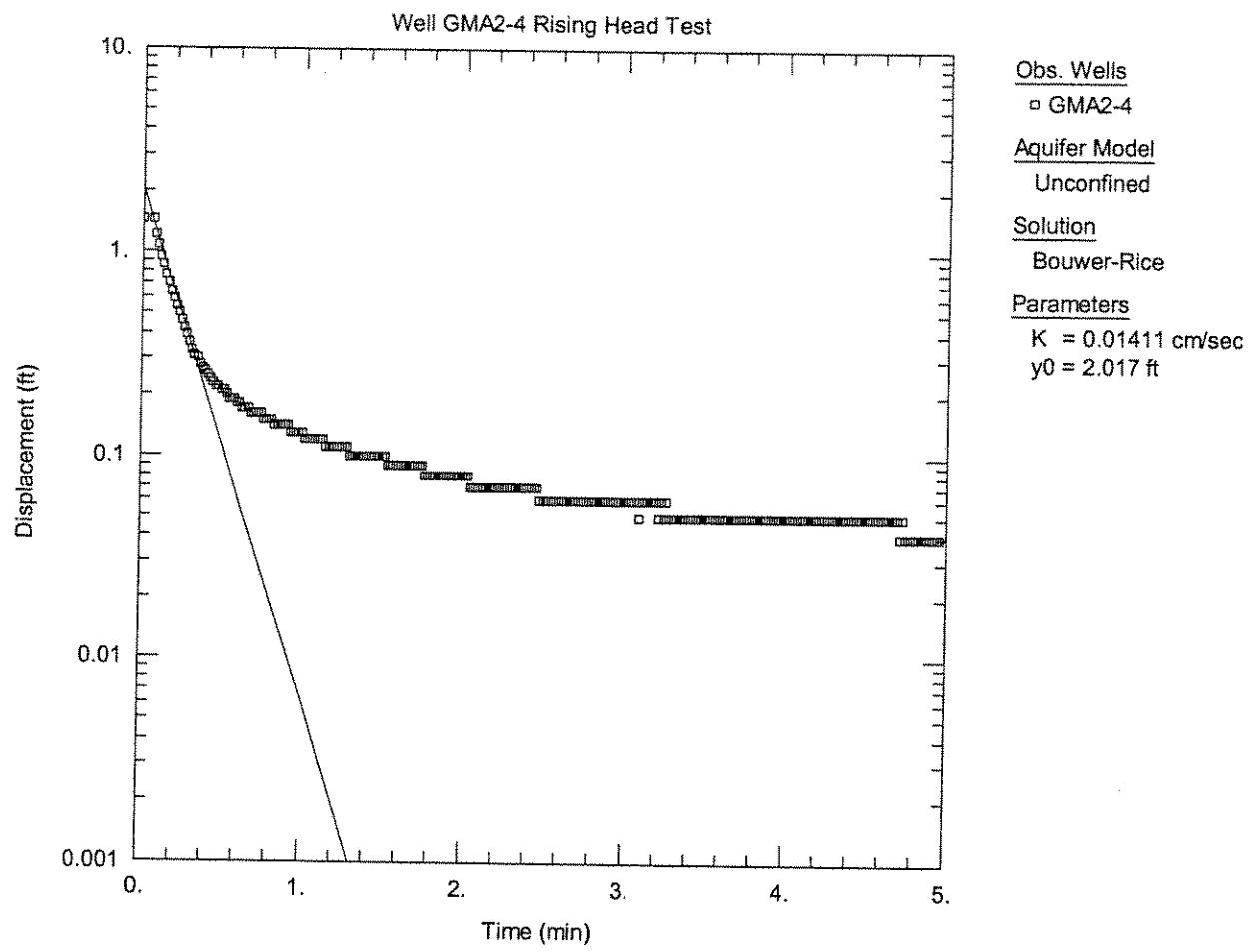


Figure C-4. Curve matching and calculation for hydraulic conductivity for monitoring well GMA2-4.

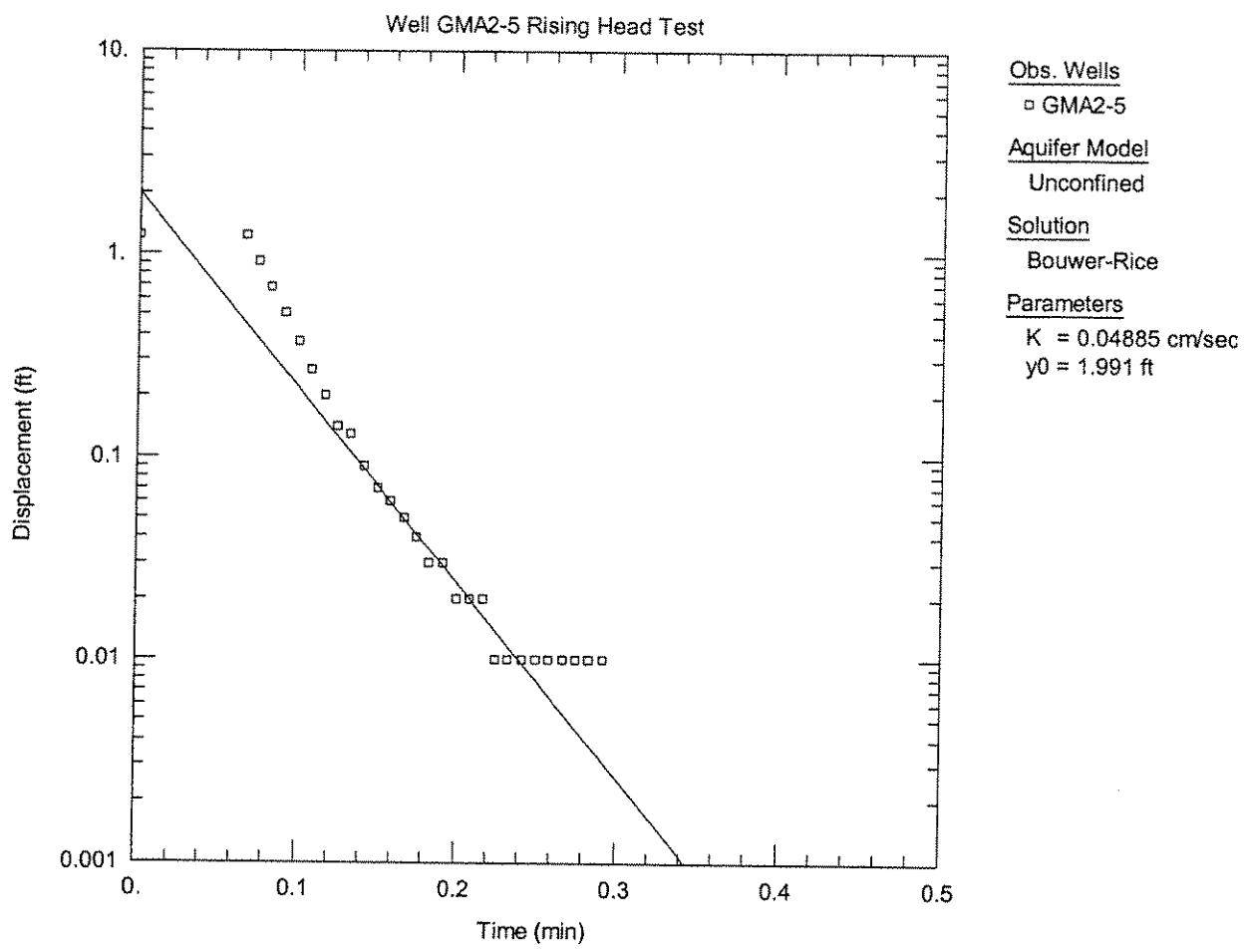


Figure C-5. Curve matching and calculation for hydraulic conductivity for monitoring well GMA2-5.

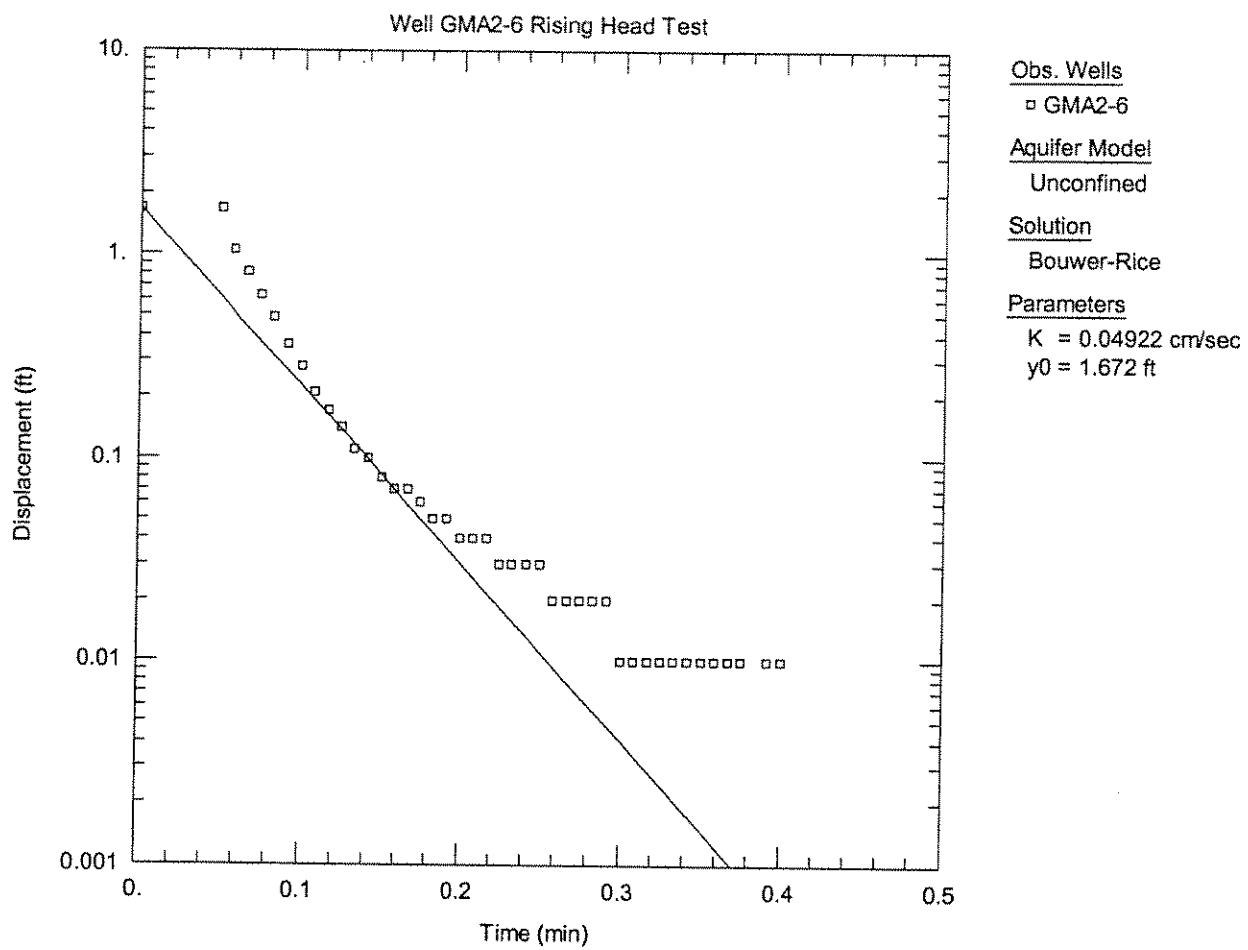


Figure C-6. Curve matching and calculation for hydraulic conductivity for monitoring well GMA2-6.

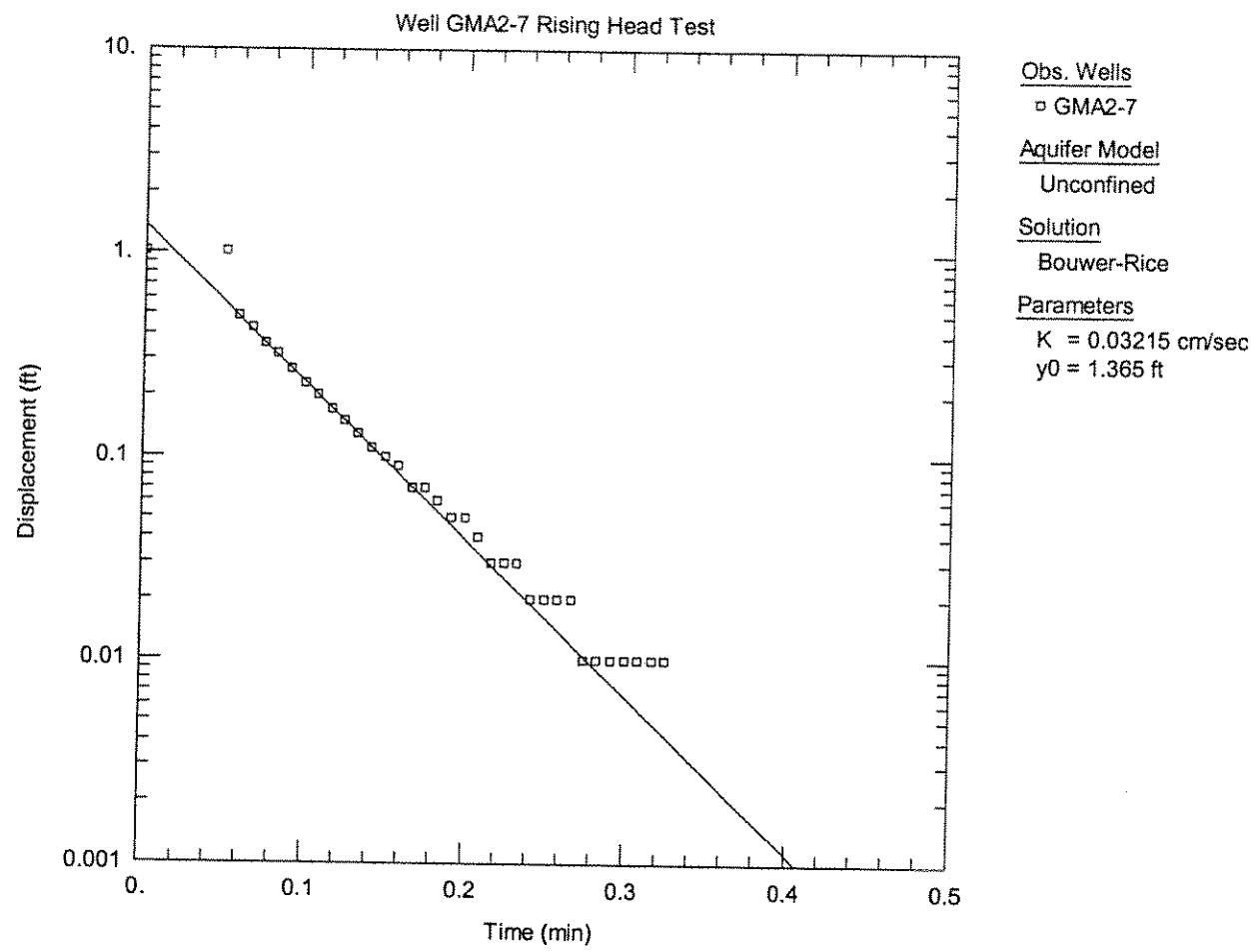


Figure C-7. Curve matching and calculation for hydraulic conductivity for monitoring well GMA2-7.

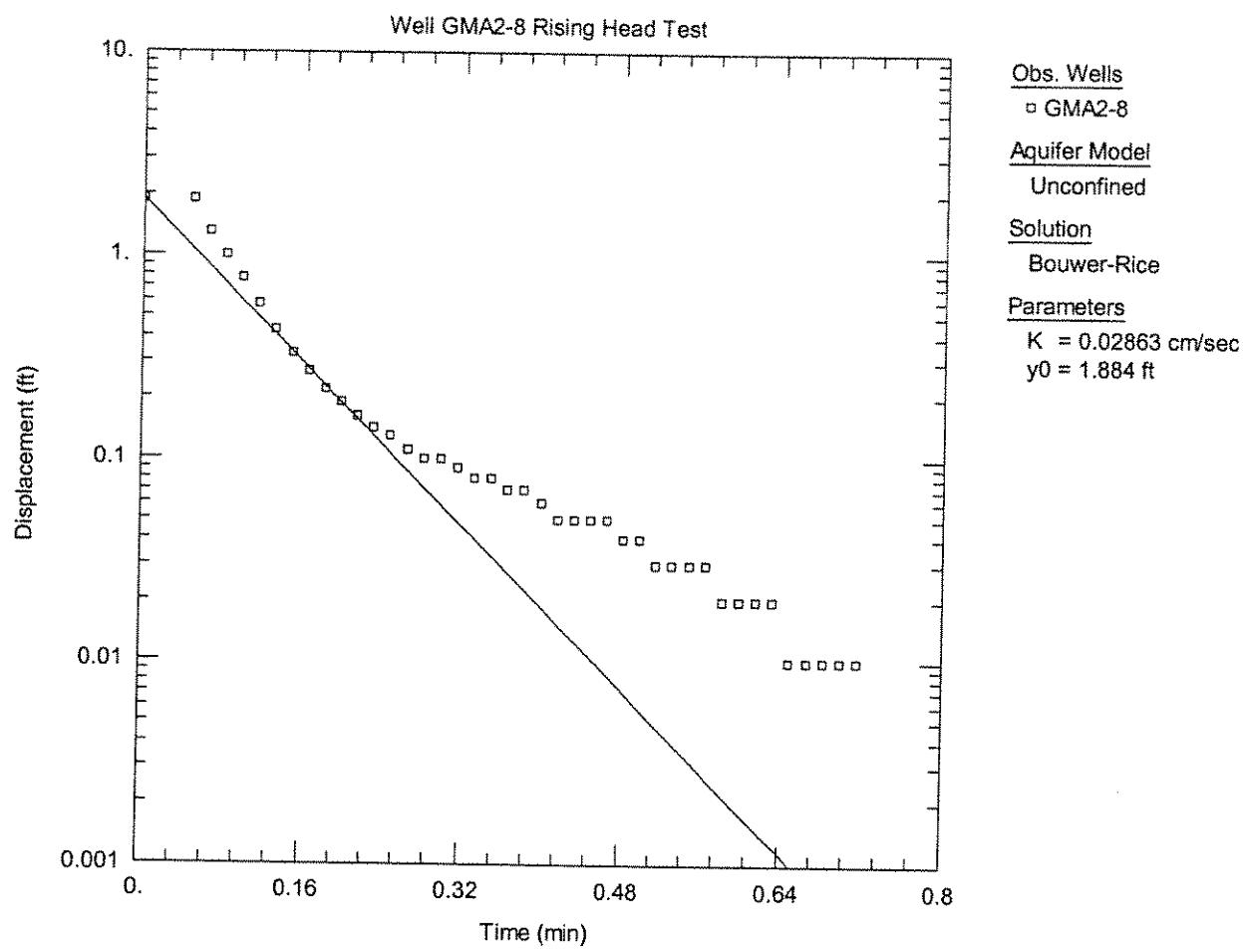


Figure C-8. Curve matching and calculation for hydraulic conductivity for monitoring well GMA2-8.

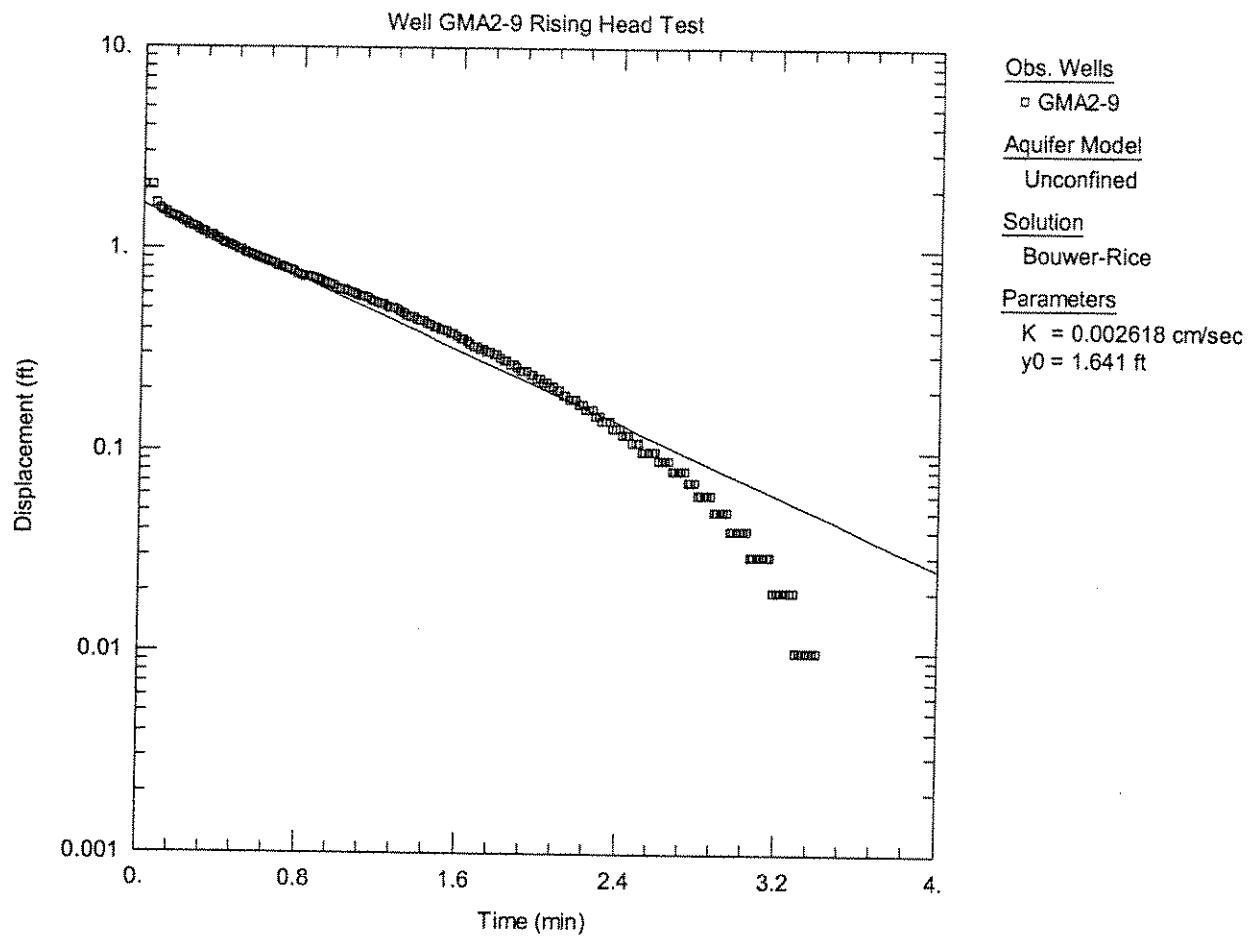


Figure C-9. Curve matching and calculation for hydraulic conductivity for monitoring well GMA2-9.

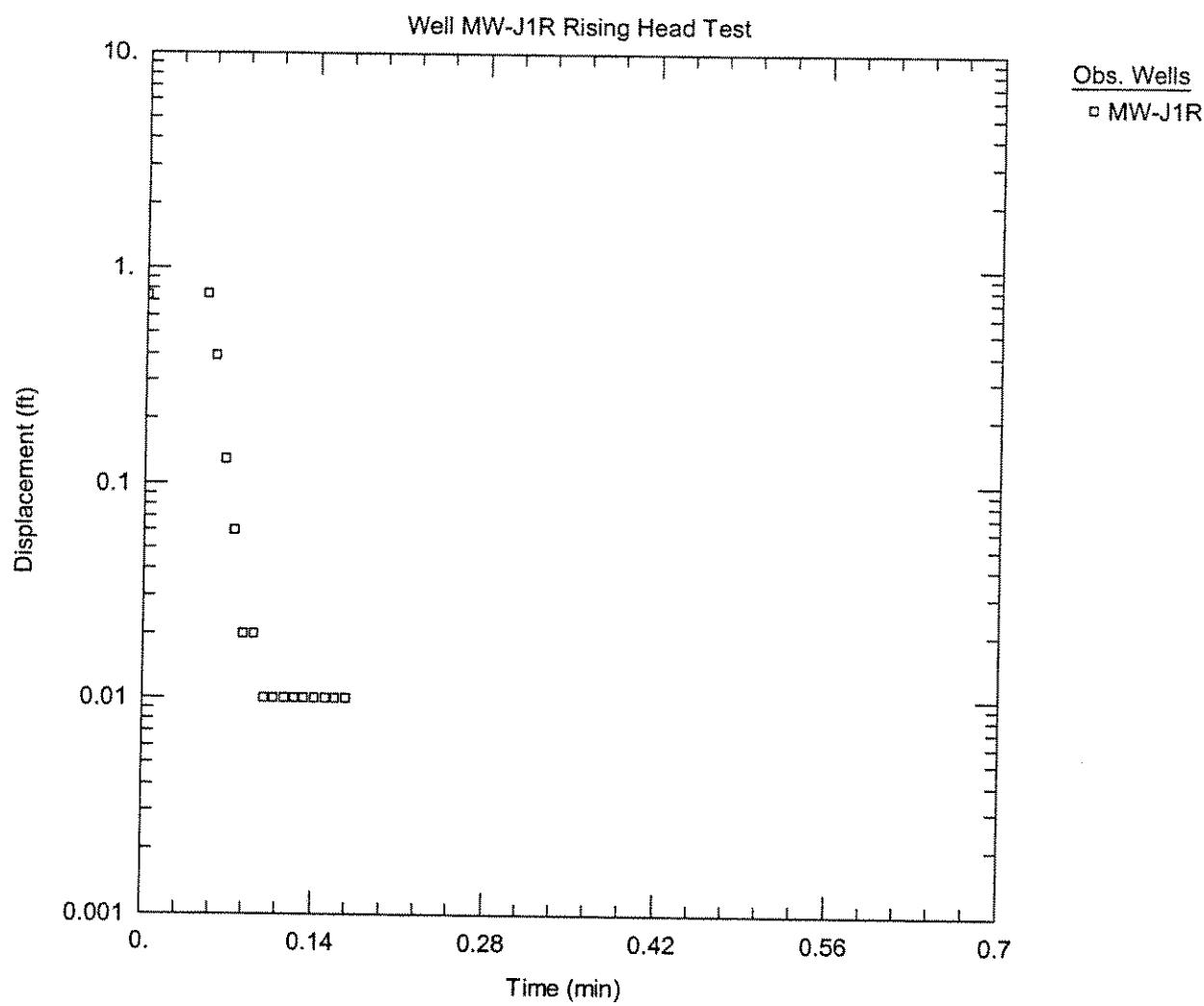


Figure C-10. Data from monitoring well MW-J1R. Well recovery occurred in 5.5 seconds. Due to the high permeability of this unit, an accurate hydraulic conductivity value could not be determined.

## ***Appendix D***

---

### **Data Validation Report**



## APPENDIX D

### GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS

#### GROUNDWATER MANAGEMENT AREA 2

#### SPRING 2002 GROUNDWATER SAMPLING DATA VALIDATION REPORT

##### 1.0 General

This attachment summarizes the Tier I and Tier II data review performed for groundwater samples collected at the Former Oxbows K & J Groundwater Management Area Plant Site 2 Groundwater Management Area (GMA 2) located in Pittsfield, Massachusetts. The samples were analyzed for various constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents -- benzidine, 2-chloroethyl vinyl ether, and 1,2-diphenylhydrazine (hereafter referred to as Appendix IX+3), by CT&E Environmental Services Inc. of Charleston, West Virginia. Data validation was performed for 8 polychlorinated biphenyl (PCB) samples, 5 volatile organic compound (VOC) samples, 4 semi-volatile organic compound (SVOC) samples, 4 pesticide/herbicide samples, 4 polychlorinated dibenzo-p-dioxin (PCDD)/polychlorinated dibenzofuran (PCDF) samples, 4 metals samples, and 4 cyanide/sulfide samples that were collected.

##### 2.0 Data Evaluation Procedures

This attachment outlines the applicable quality control criteria utilized during the data review process and any deviations from those criteria. The data review was conducted in accordance with the following documents:

- *Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts*, Blasland, Bouck & Lee, Inc. (FSP/QAPP; approved October 17, 2000);
- *Region I Tiered Organic and Inorganic Data Validation Guidelines*, USEPA Region I (July 1, 1993);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses*, USEPA Region I (June 13, 1988) (Modified February 1989);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (February 1, 1988) (Modified November 1, 1988);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (Draft, December 1996); and,
- *National Functional Guidelines for Dioxin/Furan Data Validation*, USEPA (Draft, January 1996).

A tabulated summary of the Tier I and Tier II data evaluation is presented in Table D-1. Each sample subjected to evaluation is listed in Table D-1 to document that data review was performed, as well as present the highest level of data validation (Tier I or Tier II) that was applied. Samples that required data qualification are listed separately for each parameter (compound or analyte) that required qualification.

The following data qualifiers have been used in this data evaluation.

- J      The compound or analyte was positively identified, but the associated numerical value is an estimated concentration. This qualifier is used when the data evaluation procedure identifies a deficiency in the data generation process. This qualifier is also used when a compound or analyte is detected at estimated concentrations less than the practical quantitation limit (PQL).
- U      The compound or analyte was analyzed for, but was not detected. The sample quantitation limit is presented and adjusted for dilution and (for solid samples only) percent moisture. Non-detected sample results are presented as ND(PQL) within this report and in Table D-1 for consistency with previous documents prepared for this investigation.
- UJ     The compound or analyte was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual level of quantitation. Non-detected sample results that required qualification are presented as ND(PQL) J within this report and in Table D-1 for consistency with previous documents prepared for this investigation.
- R      Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data should not be used for any qualitative or quantitative purposes.

### **3.0 Data Validation Procedures**

The FSP/QAPP provides (in Section 7.5) that all analytical data will be validated to a Tier I level following the procedures presented in the *Region I Tiered Organic and Inorganic Data Validation Guidelines* (USEPA guidelines). Accordingly, 100% of the analytical data for these investigations were subjected to Tier I review. The Tier I review consisted of a completeness evidence audit, as outlined in the *USEPA Region I CSF Completeness Evidence Audit Program* (USEPA Region I, 7/31/91), to ensure that all laboratory data and documentation were present. A tabulated summary of the samples subjected to Tier I and Tier II data evaluation is presented below.

**Summary of Samples Subjected to Tier I and Tier II Data Validation**

Parameter	Tier I Only			Tier I & Tier II			Total
	Samples	Duplicates	Blanks	Samples	Duplicates	Blanks	
PCBs	0	0	0	8	0	0	8
VOCs	0	0	0	5	0	0	5
SVOCs	0	0	0	4	0	0	4
Pesticides/ Herbicides	0	0	0	4	0	0	4
PCDDs/PCDFs	0	0	0	4	0	0	4
Metals	0	0	0	8	0	0	8
Cyanide/Sulfide	0	0	0	4	0	0	4
Total	0	0	0	36	0	0	37

In the event that data packages were determined to be incomplete, the missing information was requested from the laboratory. Upon completion of the Tier I review, the data packages complied with the USEPA Region I

As specified in the FSP/QAPP of the laboratory sample delivery group package to a Tier II review. A Tier II review was also performed to resolve data usability limitations that were identified from laboratory qualification of the data during the Tier I data review. The Tier II data review consisted of a review of all data package summary forms for identification of quality assurance/quality control (QA/QC) deviations and qualification of the data according to the Region I Data Validation Functional Guidelines. The Tier II review resulted in the qualification of data for several samples due to minor QA/QC deficiencies.

When qualification of the sample data was required, the sample results associated with a QA/QC parameter deviation were qualified in accordance with the procedures outlined in the USEPA Region I data validation guidance documents. When the data validation process identified several quality control deficiencies, the cumulative effect of the various deficiencies was employed in assigning the final data qualifier. A summary of the QA/QC parameter deviations that resulted in data qualification is presented below for each analytical method.

#### **4.0 Data Review**

Initial calibration criterion for organic analyses requires that the average relative response factor (RRF) have a value greater than 0.05. Sample results were qualified as an estimate (J) when this criterion was exceeded. The compounds that exceeded initial calibration criterion and the number of samples qualified are presented below.

**Analysis Qualified Due to Initial Calibration RRF Deviations**

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	2-Chloroethylvinylether	5	J
	Acetone	5	J
	Acetonitrile	5	J
	Acrolein	5	J
	Acrylonitrile	5	J
	Isobutanol	5	J
	Propionitrile	5	J
SVOCS	4-Phenylenediamine	4	J

Continuing calibration criterion for organic analyses requires that the continuing calibration RRF have a value greater than 0.05. Sample results were qualified as an estimate (J) when this criterion was exceeded. The compounds that exceeded continuing calibration criterion and the number of samples qualified are presented below.

**Analysis Qualified Due to Continuing Calibration RRF Deviations**

Analysis	Compound	Number of Affected Samples	Qualification
SVOCS	1,4-Dioxane	5	J

Several of the organic compounds (including the compounds presented in the two tables above detailing RRF deviations) exhibit instrument response factors (RFs) that are below the USEPA Region I minimum value of 0.05, but meet the analytical method criterion, which does not specify minimum RFs for these compounds. These compounds were analyzed by the laboratory at a higher concentration than the compounds that normally exhibit RFs greater than the USEPA Region I minimum value of 0.05 in an effort to demonstrate acceptable

response. USEPA Region I guideline states that non-detected compound results associated with a RF less than the minimum value of 0.05 are to be rejected. In the case of these select organic compounds, the RF is an inherent problem with the current analytical methodology; therefore, the non-detected samples results were qualified as an estimate (J).

The continuing calibration criterion requires that the %D between the initial calibration RRF and the continuing calibration RRF for SVOCs be less than 25% and for herbicides be less than 15%. Sample data for detected and non-detected compounds with %D values that exceeded the continuing calibration criterion were qualified as approximated (J). A summary of the compounds that exceeded continuing calibration criterion and the number of samples qualified due to those deviations are identified below.

**Compounds Qualified Due to Continuing Calibration of %D Values**

Analysis	Compound	Number of Affected Samples	Qualification
SVOCs	2,3,4,6-Tetrachlorophenol	4	J
	4-Chlorobenzilate	4	J
	4-Nitroquinoline-1-oxide	4	J
	Aramite	4	J
	Hexachloropropene	4	J
	Pentachloronitrobenzene	4	J

Contract required detection limit (CRDL) standards were analyzed to evaluate instrument performance at low-level concentrations that are near the analytical method PQL. These standards are required to have recoveries between 80 and 120% to verify that the analytical instrumentation was properly calibrated. When CRDL standard recoveries exceeded the 80 to 120% control limits, the affected samples with detected results at or near the PQL concentration (less than three times the PQL) were qualified as approximated (J). The analyte that exceeded CRDL criteria and the number of samples qualified due to those deviations are presented below.

**Analytes Qualified Due to CRDL Deviations**

Analysis	Analytes	Number of Affected Samples	Qualification
Inorganics	Thallium	8	J

Field, laboratory, and method blanks were analyzed to evaluate whether field sampling equipment or laboratory background contamination may have contributed to the reported sample results. When detected analytes were identified in a blank sample, blank action levels were calculated at ten times the blank concentrations for the common laboratory contaminant compounds (OCDD and OCDF) and five times the blank concentration for all other detected analytes. Detected sample results that were below the blank action level were qualified with a "U." The compound detected in the method blank and which resulted in qualification of sample data are presented below.

**Compounds Qualified Due to Blank Deviations**

Analysis	Compound	Number of Affected Samples	Qualification
PCDDs/PCDFs	OCDD	2	U

Surrogate compounds are analyzed with every organic sample to aid in the evaluation of the sample extraction efficiency. For a number of samples, the incorrect amount of surrogate spiking solution was used during extraction procedure. Therefore, the samples were analyzed at no dilution and at a dilution to bring the

surrogates within calibration range. None of the data was subject to any qualification due to this method deviation. A summary of the affected samples due to this deviation are shown below.

Analysis	Qualification
PCBs	GMA2-4
	GMA2-5
	GMA2-8
	GMA2-9

## 5.0 Overall Data Usability

This section summarizes the analytical data in terms of its completeness and usability for site characterization purposes. Data completeness is defined as the percentage of sample results that have been determined to be usable during the data validation process. Data completeness with respect to usability was calculated separately for inorganic and each of the organic analyses. The percent usability calculation included analyses evaluated under both Tier I and Tier II data validation reviews. The percent usability calculation also includes quality control samples collected to aid in the evaluation of data usability. Therefore, field/equipment blank, trip blank, and field duplicate data determined to be unusable as a result of the validation process are represented in the percent usability value tabulated below.

Data Usability

Parameter	Percent Usability	Rejected Data
Inorganics	100	None
Cyanide and Sulfide	100	None
Volatile Organics	100	None
Semivolatile Organics	100	None
PCBs	100	None
Pesticides and Herbicides	100	None
PCDDs/PCDFs	100	None

The data package completeness, as determined from the Tier I data review, was used in combination with the data quality deviations identified during the Tier II data review to determine overall data quality. As specified in the FSP/QAPP, the overall precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters determined from the Tier I and Tier II data reviews were used as indicators of overall data quality. These parameters were assessed through an evaluation of the results of the field and laboratory QA/QC sample analyses to provide a measure of compliance of the analytical data with the data quality objectives (DQOs) specified in the FSP/QAPP. Therefore, the following sections present summaries of the PARCC parameters assessment with regard to the DQOs specified in the FSP/QAPP.

## 5.1 Precision

Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is a quantitative measure of the variability of a group of measurements compared to their average value. For this investigation, precision was defined as the RPD between duplicate sample results. The duplicate samples used to evaluate precision included laboratory duplicates, field duplicates, matrix spike/matrix spike duplicate (MS/MSD) samples, and ICP serial dilution samples. For this analytical program, none of the data required qualification for laboratory duplicate RPD MS/MSD RPD, field duplicate RPD, or ICP serial dilutions.

## **5.2 Accuracy**

Accuracy measures the bias in an analytical system or the degree of agreement of a measurement with a known reference value. For this investigation, accuracy was defined as the percent recovery of QA/QC samples that were spiked with a known concentration of an analyte or compound of interest. The QA/QC samples used to evaluate analytical accuracy included instrument calibration, internal standards, laboratory control standards (LCSs), MS/MSD samples, contract required detection limit (CRDL) samples, and surrogate compound recoveries. For this analytical program, 6.6% of the data required qualification for calibration deviations and 0.77% of the data required qualification for CRDL standard recoveries. None of the data required qualification for MS/MSD recoveries, surrogate compound recoveries, internal standard recoveries, or LCS recoveries.

## **5.3 Representativeness**

Representativeness expresses the degree to which sample data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is a qualitative parameter which is most concerned with the proper design of the sampling program. The representativeness criterion is best satisfied by making certain that sampling locations are selected properly and a sufficient number of samples are collected. This parameter has been addressed by collecting samples at locations specified in Agency approved work plans, and by following the procedures for sample collection/analyses that were described in the FSP/QAPP. Additionally, the analytical program used procedures that were consistent with USEPA approved analytical methodology. A QA/QC parameter that is an indicator of the representativeness of a sample is holding time. Holding time criteria are established to maintain the samples in a state that is representative of the in-situ field conditions before analysis. For this analytical program, none of the data required qualification for exceeding holding time requirements.

## **5.4 Comparability**

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. This goal was achieved through the use of the standardized techniques for sample collection and analysis presented in the FSP/QAPP. The USEPA SW-846<sup>1</sup> analytical methods presented in the FSP/QAPP are updated on occasion by the USEPA to benefit from recent technological advancements in analytical chemistry and instrumentation. In most cases, the method upgrades include the incorporation of new technology that improves the sensitivity and stability of the instrumentation or allows the laboratory to increase throughput without hindering accuracy and precision. Overall, the analytical methods for this investigation have remained consistent in their general approach through continued use of the basic analytical techniques (i.e., sample extraction/preparation, instrument calibration, QA/QC procedures, etc.). Through this use of consistent base analytical procedures and by requiring that updated procedures meet the QA/QC criteria specified in the FSP/QAPP, the analytical data from past, present, and future sampling events will be comparable to allow for qualitative and quantitative assessment of site conditions.

---

<sup>1</sup> Test Methods for evaluating Solid Waste, SW-846, USEPA, Final Update III, December 1996

## **5.5 Completeness**

Completeness is defined as the percentage of measurements that are judged to be valid or usable to meet the prescribed DQOs. The completeness criterion is essentially the same for all data uses -- the generation of a sufficient amount of valid data. The actual completeness of this analytical data set was 100% for individual analytical parameters and had an overall usability of 100%, which is greater than the minimum required usability of 90% as specified in the FSP/QAPP.

**TABLE D-1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

**FORMER OXBOWS K & J GROUNDWATER MANAGEMENT AREA BASELINE GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2002**

**ANALYTICAL DATA VALIDATION SUMMARY**  
 (Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>PCBs</b>											
2DOP494	GMA2-4	4/17/2002	Water	Tier II	No						Incorrect amount of spike solution used during extraction procedure.
2DOP494	GMA2-4-filtered	4/17/2002	Water	Tier II	No						
2DOP494	GMA2-5	4/17/2002	Water	Tier II	No						Incorrect amount of spike solution used during extraction procedure.
2DOP494	GMA2-5-filtered	4/17/2002	Water	Tier II	No						
2DOP494	GMA2-8	4/16/2002	Water	Tier II	No						Incorrect amount of spike solution used during extraction procedure.
2DOP494	GMA2-8-filtered	4/16/2002	Water	Tier II	No						
2DOP494	GMA2-9	4/17/2002	Water	Tier II	No						Incorrect amount of spike solution used during extraction procedure.
2DOP494	GMA2-9-filtered	4/17/2002	Water	Tier II	No						
<b>Pesticides and Herbicides</b>											
2DOP494	GMA2-4	4/17/2002	Water	Tier II	No						
2DOP494	GMA2-5	4/17/2002	Water	Tier II	No						
2DOP494	GMA2-8	4/16/2002	Water	Tier II	No						
2DOP494	GMA2-9	4/17/2002	Water	Tier II	No						
<b>Metals</b>											
2DOP494	GMA2-4	4/17/2002	Water	Tier II	Yes	Thallium	CRDL Standard %R	77.6%	80% to 120%	ND(0.0100) J	
2DOP494	GMA2-4-filtered	4/17/2002	Water	Tier II	Yes	Thallium	CRDL Standard %R	77.6%	80% to 120%	ND(0.0100) J	
2DOP494	GMA2-5	4/17/2002	Water	Tier II	Yes	Thallium	CRDL Standard %R	77.6%	80% to 120%	ND(0.0100) J	
2DOP494	GMA2-5-filtered	4/17/2002	Water	Tier II	Yes	Thallium	CRDL Standard %R	77.6%	80% to 120%	ND(0.0100) J	
2DOP494	GMA2-8	4/16/2002	Water	Tier II	Yes	Thallium	CRDL Standard %R	77.6%	80% to 120%	ND(0.0100) J	
2DOP494	GMA2-8-filtered	4/16/2002	Water	Tier II	Yes	Thallium	CRDL Standard %R	77.6%	80% to 120%	ND(0.0100) J	
2DOP494	GMA2-9	4/17/2002	Water	Tier II	Yes	Thallium	CRDL Standard %R	77.6%	80% to 120%	ND(0.0100) J	
2DOP494	GMA2-9-filtered	4/17/2002	Water	Tier II	Yes	Thallium	CRDL Standard %R	77.6%	80% to 120%	ND(0.0100) J	
<b>VOCs</b>											
2DOP494	GMA2-4	4/17/2002	Water	Tier II	Yes	1,4-Dioxane	CCAL RRF	0.001	>0.05	ND(0.20) J	
						2-Chloroethylvinylether	ICAL RRF	0.049	>0.05	ND(0.0050) J	
						Acetone	ICAL RRF	0.037	>0.05	ND(0.010) J	
						Acetonitrile	ICAL RRF	0.033	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.027	>0.05	ND(0.10) J	
						Acrylonitrile	ICAL RRF	0.020	>0.05	ND(0.0050) J	
						Isobutanol	ICAL RRF	0.018	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.010	>0.05	ND(0.010) J	
2DOP494	GMA2-5	4/17/2002	Water	Tier II	Yes	1,4-Dioxane	CCAL RRF	0.001	>0.05	ND(0.20) J	
						2-Chloroethylvinylether	ICAL RRF	0.049	>0.05	ND(0.0050) J	
						Acetone	ICAL RRF	0.037	>0.05	ND(0.010) J	
						Acetonitrile	ICAL RRF	0.033	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.027	>0.05	ND(0.10) J	
						Acrylonitrile	ICAL RRF	0.020	>0.05	ND(0.0050) J	
						Isobutanol	ICAL RRF	0.018	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.010	>0.05	ND(0.010) J	
2DOP494	GMA2-8	4/16/2002	Water	Tier II	Yes	1,4-Dioxane	CCAL RRF	0.001	>0.05	ND(0.20) J	
						2-Chloroethylvinylether	ICAL RRF	0.049	>0.05	ND(0.0050) J	
						Acetone	ICAL RRF	0.037	>0.05	ND(0.010) J	
						Acetonitrile	ICAL RRF	0.033	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.027	>0.05	ND(0.10) J	
						Acrylonitrile	ICAL RRF	0.020	>0.05	ND(0.0050) J	
						Isobutanol	ICAL RRF	0.018	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.010	>0.05	ND(0.010) J	

**TABLE D-1**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**  
**FORMER OXBOWS K & J GROUNDWATER MANAGEMENT AREA BASELINE GROUNDWATER QUALITY INTERIM REPORT FOR SPRING 2002**

**ANALYTICAL DATA VALIDATION SUMMARY**  
 (Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
<b>VOCs (continued)</b>											
2DOP494	GMA2-9	4/17/2002	Water	Tier II	Yes	1,4-Dioxane	CCAL RRF	0.001	>0.05	ND(0.20) J	
						2-Chloroethylvinylether	ICAL RRF	0.049	>0.05	ND(0.0050) J	
						Acetone	ICAL RRF	0.037	>0.05	ND(0.010) J	
						Acetonitrile	ICAL RRF	0.033	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.027	>0.05	ND(0.10) J	
						Acrylonitrile	ICAL RRF	0.020	>0.05	ND(0.0050) J	
						Isobutanol	ICAL RRF	0.018	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.010	>0.05	ND(0.010) J	
2DOP494	TRIP BLANK	4/17/2002	Water	Tier II	Yes	1,4-Dioxane	CCAL RRF	0.001	>0.05	ND(0.20) J	
						2-Chloroethylvinylether	ICAL RRF	0.049	>0.05	ND(0.0050) J	
						Acetone	ICAL RRF	0.037	>0.05	ND(0.010) J	
						Acetonitrile	ICAL RRF	0.033	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.027	>0.05	ND(0.10) J	
						Acrylonitrile	ICAL RRF	0.020	>0.05	ND(0.0050) J	
						Isobutanol	ICAL RRF	0.018	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.010	>0.05	ND(0.010) J	
<b>SVOCs</b>											
2DOP494	GMA2-4	4/17/2002	Water	Tier II	Yes	2,3,4,6-Tetrachlorophenol	CCAL %D	31.1%	<30%	ND(0.010) J	
						4-Chlorobenzilate	CCAL %D	72.8%	<30%	ND(0.010) J	
						4-Nitroquinoline-1-oxide	CCAL %D	36.7%	<30%	ND(0.010) J	
						4-Phenylenediamine	ICAL RRF	0.031	>0.05	ND(0.010) J	
						Aramite	CCAL %D	45.9%	<30%	ND(0.010) J	
						Hexachloropropene	CCAL %D	35.9%	<30%	ND(0.010) J	
						Pentachloronitrobenzene	CCAL %D	34.3%	<30%	ND(0.010) J	
2DOP494	GMA2-5	4/17/2002	Water	Tier II	Yes	2,3,4,6-Tetrachlorophenol	CCAL %D	31.1%	<30%	ND(0.010) J	
						4-Chlorobenzilate	CCAL %D	72.8%	<30%	ND(0.010) J	
						4-Nitroquinoline-1-oxide	CCAL %D	36.7%	<30%	ND(0.010) J	
						4-Phenylenediamine	ICAL RRF	0.031	>0.05	ND(0.010) J	
						Aramite	CCAL %D	45.9%	<30%	ND(0.010) J	
						Hexachloropropene	CCAL %D	35.9%	<30%	ND(0.010) J	
2DOP494	GMA2-8	4/16/2002	Water	Tier II	Yes	2,3,4,6-Tetrachlorophenol	CCAL %D	34.3%	<30%	ND(0.010) J	
						4-Chlorobenzilate	CCAL %D	31.1%	<30%	ND(0.010) J	
						4-Nitroquinoline-1-oxide	CCAL %D	72.8%	<30%	ND(0.010) J	
						4-Phenylenediamine	ICAL RRF	0.031	<30%	ND(0.010) J	
						Aramite	CCAL %D	45.9%	<30%	ND(0.010) J	
						Hexachloropropene	CCAL %D	35.9%	<30%	ND(0.010) J	
						Pentachloronitrobenzene	CCAL %D	34.3%	<30%	ND(0.010) J	
2DOP494	GMA2-9	4/17/2002	Water	Tier II	Yes	2,3,4,6-Tetrachlorophenol	CCAL %D	34.3%	<30%	ND(0.010) J	
						4-Chlorobenzilate	CCAL %D	31.1%	<30%	ND(0.010) J	
						4-Nitroquinoline-1-oxide	CCAL %D	72.8%	<30%	ND(0.010) J	
						4-Phenylenediamine	ICAL RRF	0.031	<30%	ND(0.010) J	
						Aramite	CCAL %D	45.9%	<30%	ND(0.010) J	
						Hexachloropropene	CCAL %D	35.9%	<30%	ND(0.010) J	
						Pentachloronitrobenzene	CCAL %D	34.3%	<30%	ND(0.010) J	
<b>PCDDs/PCDFs</b>											
2DOP494	GMA2-4	4/17/2002	Water	Tier II	Yes	OCDD	Method Blank	-	-	ND(0.000000020)	
2DOP494	GMA2-5	4/17/2002	Water	Tier II	No						
2DOP494	GMA2-8	4/16/2002	Water	Tier II	Yes	OCDD	Method Blank	-	-	ND(0.000000015)	
2DOP494	GMA2-9	4/17/2002	Water	Tier II	No						Duplicate of GMA5-2
<b>Sulfide and Cyanide</b>											
2DOP494	GMA2-4	4/17/2002	Water	Tier II	No						
2DOP494	GMA2-5	4/17/2002	Water	Tier II	No						
2DOP494	GMA2-8	4/16/2002	Water	Tier II	No						
2DOP494	GMA2-9	4/17/2002	Water	Tier II	No						